

Feedback Loop Report

Explanation

Energy Efficiency Watch 4 (EEW4) is a Horizon 2020 project aimed at supporting policymakers in the EU in enhancing effective implementation of policy instruments for energy efficiency, thereby contributing to reach the target of the Energy Efficiency Directive. Based on multiple inputs from policymakers, business stakeholders and energy experts collected through dedicated workshops and a broadly disseminated online survey, EEW4 is identifying and developing argumentative drivers in public discourses that facilitate the adoption and effective implementation of energy efficiency policies in the EU.



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Task 3.1: Methodology and preparation of input phase

Deliverable: D 3.1 Documentation of Methodology

Introduction

Building on the experience of the previous editions of the Energy Efficiency Watch project, Energy Efficiency Watch 4 (EEW4) will go beyond the traditional approach of analysing policy instruments for their effectiveness. Indeed, a key finding was that a) energy efficiency targets are not achieved because societal benefit is not sufficiently recognized, and b) that successful implementation of energy efficiency policies depends to a great extent on the existence of underlying enabling narrative(s), spurring acceptance among decision-makers, stakeholders and also significant parts of the population. Where discourses are not structured by such enabling narratives, energy efficiency is often controversially debated or ignored, leading to frequent changes of policies and unambitious implementation of measures.

Against this backdrop, EEW4 endeavours to create a better understanding of the discursive conditions, motivations and dynamics of policy debates that enable the implementation of ambitious energy efficiency policies, or that succeed in transforming discursive frameworks in a way that supports energy efficiency. To this end, the project collects input from a wide range of actors, including national and EU parliamentarians, business stakeholders and energy experts. Feedback and good practices will be shared across the EU and national level, helping to leverage impact.

The purpose of this document is to provide a methodological framework for collecting, identifying and analysing enabling narratives that will guide the design and implementation of the input formats and subsequent analysis. Input formats in EEW4 comprise workshops with national and EU Members of Parliament as well as interparliamentary workshops, workshops with business stakeholders and a comprehensive survey of energy experts. In addition, a focus group will provide expert feedback, helping to structure the analysis of enabling narratives. While this document provides the methodological framework, the specific design of these input formats is outlined in the Event Storyline (Deliverable 2.1).

Intervention logic

The guiding question for our analysis in the framework of Energy Efficiency Watch 4 can be summarised as follows: **Which narratives enable the effective adoption and implementation of energy efficiency policies in the EU?** In a second step, we will also look at how adverse discourses can be transformed in a way that supports effective policy implementation. Counter-narratives preventing ambitious efficiency measures are thus also considered. In a schematic fashion, and bearing in mind the continuous dynamic of policy adoption, implementation and feedback, the analysis in EEW4 departs from the following working hypotheses regarding how narratives intervene in the policy cycle:



The analysis will focus on the main structuring discourses and narratives around energy efficiency policies.

Methodological approach

1) Definitions and analytical concepts

The EEW4 approach to analysing discourses on energy efficiency is ground on relevant social and political science research. We understand **narratives** broadly as a set of consistent chain of statements or stories that typically have a beginning, a middle part and end. Importantly, these stories can be considered as political mechanisms themselves to build consensus among a group of actors, given that 'without stories no consensus' (Hajer 2002). As the constitutive elements of narratives, these stories are often told neither in chronological order nor in full length, but rather expressed in short **story lines**, presupposing specific background knowledge of the narrative in question (Hajer 2005). A common element of these stories are rhetorical figures such as metaphors, with the help of which structural problems are named and specific problems are connected to wider concepts (Hajer 2008).

In the context of EEW4, we can thus conceptualise **enabling narratives** as a set of story lines about accepted benefits of energy efficiency in a country or a region. In addition to energy or climate related benefits, these can be economic benefits (e.g. saving money for energy users), social benefits (e.g. fewer unhealthy buildings) or political benefits (e.g. decreasing import dependency).

Key for the adoption and effective implementation of policies in that sense is how narratives structure the actor landscape of decision-makers, stakeholders and civil society into **discourse coalitions**. As discursive phenomena, these coalitions are understood as a group of actors that 'shares the usage of a particular set of story lines over a particular period of time' (Hajer 2005). In that sense, policy coalitions are 'reproduced and transformed through a variety of political actors that do not necessarily meet but through their very activities reinforce a particular set of story lines in a given policy domain' (Fischer 2003). How energy efficiency policies are adopted and implemented can thus be analysed in light of coalition structures shaped by competing narratives. Against this backdrop, the dominance or **hegemony of a narrative** would be conditioned on: 1) the bandwidth and kind of actors reproducing it, 2) the degree of institutionalisation and 3) the capacity of the narrative to adapt over time to accommodate new evolutions (Hajer 2005).

Drawing on Kingdon's (1984) multiple streams approach to agenda-setting and policy change, prospects for new narratives to alter the political agenda should be the greatest when they are able to use/ create **windows of opportunity**, i.e. by framing salient issues in the public debate and linking them to the dynamics of institutional politics. Typical examples for such opportunities are election periods, at a time when a running policy is up for renewal, or when certain issues suddenly gain public salience due to unexpected focussing events (e.g. catastrophes etc.).

2) Conceptual approach

For the collection and analysis of empirical material, EEW4 follows a combined inductive and deductive approach, building on grounded theory. The design of the EEW4 setup along its 1) input, 2) testing and 3) dissemination phase allows to derive hypotheses from collected empirical material (induction) and to test those hypotheses against empirical evidence (deduction) so as to avoid influencing research with our own set of predefined interpretations to the extent possible. In the process, EEW4 will analyse enabling narratives and suggest ways on how to develop new ones to support ambitious energy efficiency policies in the EU.

The discourse universe to be analysed in EEW4 centres on the adoption or reform and implementation of EU and national energy efficiency policies and the key debates around them, resulting in a focus on national and EU lawmakers, business stakeholders and the energy expert community. Narratives will mostly be analysed at the national and EU level, yet regional narratives with a strong impact might also be considered.

Operationalisation

The methodology for the collection and analysis of the input will in its practical implementation consist of two phases (**input** and **analysis**), each of which following a tailored approach for the respective task and stakeholder group.

1) Input phase

The aim of the input phase is to reach out to the broadest possible range of stakeholders to report their experience on energy efficiency policies impacted by narratives. Each of these groups adds a different perspective, and for each of them, input is gathered in a different way, whilst ensuring good comparability of the results. In this task, individual agendas, question lists and moderation concepts for the respective input gathering formats (events, survey etc.) will be prepared. These will be embedded in the event storyline documents and preparation efforts (according to WP2.1).

At the input events, the EEW4 objectives will be clearly outlined to participants to focus discussions on energy efficiency. The design of the input format will be tailored to the respective target group, so will be the set of guiding questions to steer discussions and focus input, such as:

- How come that energy efficiency policies were successfully adopted?
- What have been reasons that initiatives to adopt energy efficiency policies were not successful?
- Which are the factors for the successful implementation of previously adopted energy efficiency policies?
- Which factors led to policy failure?

Participants will be asked to identify and document key themes and factors themselves so as to avoid framing the empirical material with pre-determined interpretations. Workshops will be documented with minutes in a way that provides a consistent basis for subsequent discourse analysis.

Policy makers from national and EU level will be addressed in the context of the **National Parliamentary Workshops** (WP 3.2). A moderated format with a brief key note and guiding questions for the discussion will be developed, to ensure that within a tight time frame as much high-level input can be gathered. Intense parliamentary events are always a challenge, and therefore focused preparation of each event is crucial in order to start the debate from the respective national background, understand the atmosphere in each country and to be at the frontline with the discussions and questions in order to harvest quickly the right arguments and narratives prevailing in each country and group. All results will be kept in minutes.

Following the well-established format of EEW2 and EEW3, the expert community, consisting of over 1,000 stakeholders (from research / scientific institutions, associations and NGOs, agencies / administration etc.), is approached via a comprehensive online survey (WP 3.3), combining quantitative and qualitative elements of assessing the impact of narratives on EE policies.

The **business stakeholder** community is addressed in ten separate **workshops** (WP 3.4) in ten selected EU MS. These half day workshops will be facilitated by local network partners and will work as moderated discussions with pre-defined guiding questions for discussions in smaller groups (tables of 4-6 participants exchanging experience with narratives), which then will be merged into a final plenary discussion. The format is based on successful experience from EEW3. All results will be kept through flipchart documentation and a final written summary.

Input from the networks (WP 3.5; eeeee via Borg&Co, FEDARENE, Energy Cities) is gathered

via their general assemblies, meetings, events, and through 7 webinars by Energy Cities.

The **Focus Group** (WP 3.6) acts as an additional soundboard for those inputs which are considered of particular relevance / which need some further deepening. Composed of experts from diverse backgrounds, the focus group is established to provide secondary input and review for the analysis, i.e. helping to analyse the empirical material collected and to distil and the story lines into narratives by helping to identify the structuring themes. As a basis for review and discussion, Navigant could provide the focus group with an overview on the state of the EEW4 research, e.g. in the form of a draft narrative structure. This is part of the combined inductive and deductive approach and will provide for an initial test and refinement of the hypotheses generated.

As it may happen that some of the input from other groups needs further sharpening, a mode of effectively consulting the members of this group of selected experts will be developed (e.g. interview style, group commenting, live discussion, written input) depending on the respective need.

2) Analysis

For analysing the findings of the input phase, a synthesis of the inputs will be produced and clustered, according to the above described conceptual approach (inductive and deductive).

The inputs are analysed along the following criteria:

- General relevance for the project
- Exemplary interdependence of EE policy instrument and narrative
- Coverage of the various situations in different EU-MS
- Coverage of various sectors relevant for EE policy making
- Key aspects of narrative for well-functioning of the policy instrument
- Learning effects / transfer of knowledge to other contexts
- general rules recognizable how to convey a negative narrative towards positive perception
- overarching patterns recognizable which key benefits have the highest effect in specific country contexts
- further observations to be taken into account.

The skills of the experts in the project team cover political / social science and economy, combined with extensive experience on energy efficiency related policy analysis and related political communication in the respective stakeholder contexts. In case of specific additional requirements on neighbouring subjects such as e.g. psychology of communication / political marketing, selected experts will be invited to advise the project team on incorporating these aspects in the analysis.

3) Case study development

Applying the methodological concepts outlined above, ten case studies on of energy efficiency narratives will be developed based on collected and reviewed empirical material. Starting with a kick-off at a separate session attached to one of the project meetings, representative cases will be discussed, out of which ten will be selected and elaborated. Deliverables will be a written case study and ppt presentation for each narrative, which will be used in the subsequent testing phase. The case studies will each deal with one narrative per country/ region or, where applicable, city. The case studies will aim at a good balance not only on regional distribution, but also regarding the different sectors (e.g. building or industry related policies and respective narratives), referring to the relevant EU directives (e.g. EPBD, EED). The case studies will be

built up in a standard pattern, describing

- 1) A selected EE policy instrument / policy package
- 2) a supportive narrative leading to robust implementation, providing also some country, sector, and instrument specific background
- 3) the key success factors of this combination and possible lessons learned.

Narratives will be contextualised with available information from secondary sources, e.g. regarding the quantified co-benefits of energy efficiency policies from the COMBI Horizon 2020 project.

Conclusions

The approach and steps outlined above provide the methodological basis for carrying out the key activities of EEW4 through the project's input, testing and dissemination stages. In doing so, the framework provides guidance on how to proceed to identify and analyse the narratives that enable the effective adoption and implementation of energy efficiency policies across the EU.

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Task 3.2: Narrative sessions in National Parliamentary workshops

Deliverable: D 3.2 Event Report of narrative sessions at National Parliamentary Workshops 1-3

The reports under this section compile the input collected at the three national parliamentary workshops implemented during the input phase of the EEW4 project.

Italian National Parliamentary Workshop

Event summary

The virtual parliamentary workshop for Italy took place on 23 April 2020 and discussed the topic of *The Green Deal and the National Energy and Climate Plans*. Organised by EUFORES in close cooperation with the Environmental Committee of the Senate of Italy, the event attracted 61 participants, including Members of the Italian Parliament, representatives from national ministries, the European Commission, embassies and select scientific and industry representatives.

During the conference, attendees shared opinions, thoughts and suggestions on how to accelerate the green energy transition taking into consideration the challenges that Italy is currently facing due to the economic and health crisis. Speakers presented the vision of the Italian government on how to implement what has been announced in the NECPs and how to introduce more ambitious and climate targets for the future. Speakers presented the multiple benefits of energy efficiency and renewable energy and the different legislative and financial tools introduced over the past years. The open discussion was focused on hearing different perspectives on how to make energy efficiency more appealing and socially accepted among Italian public authorities and citizens.

Input collection

Patty L'Abbate, Member of the Senate, Parliament of Italy:

- Energy efficiency is a crucial element of our policies. Energy must be accessible and affordable.
- The Green Deal should be the core to restart economic activities after COVID19. The EU should be a driver on boosting energy transition, economic development and the creation of new jobs.

Giulio Volpi, Policy Officer, RES & CCS Policy Unit, Directorate-General for Energy, European Commission:

- Reduction of the GHG emissions: the energy sector is the core of this transformation based on renewables.
- The Renovation Wave is of key importance, also because it will create jobs.

During Q&A

- Available technologies need to be employed and used in a sustainable way and we need to decarbonise all sectors. In sectors where this will be more difficult, we need to deploy energy storage solutions.

Alessandro Zagarella, Deputy Head of Cabinet of the Unit for European Union Affairs, Ministry for Environment, Land and Sea of Italy:

- Italy has invested a lot to develop a strategy for renewables with the objective to have a structured plan that fits to the European Green Deal. The JTM and the funds are one of the pillars of this Deal. Italy wants to have a proactive role on this transition. Italy is not carbon dependent but is dealing with challenges in allocating resources while addressing other difficult situations.
- The Italian economy should become more resilient to health and economic shocks.
- Italy has launched a new department within the Ministry of Environment that supports the transition.
- In 2019, the Italian government introduced first legislative tools: a new law in climate and budget, asking to have financial resources for the Green Deal and transition. Around 4 billion

euros will be available for this transition. As part of the government plan, the subsidies will be reclassified to make sure that all industries embrace a more environmental protection approach. Environmental taxes are now being reviewed and labelling has been promoted.

- Italy is supporting the Green new Deal which needs to be deployed and implemented and make sure we have the financial tools for this. We must ensure that European national economic, and financial systems are aligned and that we all speak the same language.

Stefano Buffagni, Deputy Minister, Ministry of Economic Development of Italy:

- Companies are crucial for a sustainable development. Companies in Italy are considered a benchmark in many countries, we must make sure that all economic activities are made in a sustainable way.
- It is important to have European support on financial initiatives, Member States would embrace investments in the right direction without having a negative effect on the gross domestic product. Simplified scheme of investments for the European Green Deal.
- The automotive sector is important in Italy, new facilities are needed for hybrid cars and electric cars.

During Q&A

- There are 500 million euros of non-spent structural funds in Italy.
- Hydrogen can have an important role only if based on renewable sources.
- The Italian government wants to incentivise more than 100% of energy efficiency, but always in a sustainable way, taking in consideration also the effect on citizens' energy bill.

Giovanni Perella, Senior Energy Advisor, Director General for Electricity Market, Renewables and Energy Efficiency, Ministry of Economic Development of Italy:

- It is important to be ambitious but also credible when setting targets. The Italian government approach is rather realistic, but also ambitious such as with the targets on electricity (50%), and on transport.
- To reach the objectives Italy needs a better alignment of European and national policies. Environmental protection and the renewable energy development are sometimes clashing in Italy and probably current procedures are not enough to solve these conflicts. At regional level, we need to identify areas where to install renewable energy production facilities.
- It is important to take into consideration costs in terms of company prices of energy, and the costs in terms of consumers' bill.
- In 2019, Italy introduced the law "FERR 1" for renewables, such as the wind power, the solar power, gas and other renewables which are at a mature stage of development. The government is now working on "FERR 2" law to promote renewables which are not enough mature, still costly, but very innovative. On heating and cooling, the Government is working on the criteria for new buildings and considering if to apply those criteria to the old ones as well. Buildings must comply with high energy efficient criteria.

Paolo Bertoldi, Senior Expert, European Commission - Joint Research Centre:

- Energy poverty: insulating houses can decrease their energy costs. We can create local jobs in the construction sector.
- The European policies we have now will not be enough to reach the energy efficiency target.

Gianni Girotto, Member of the Senate of the Republic of Italy:

- The Italian government is working on a list of initiatives on energy poverty and energy community.

Dario Di Santo, Director of the Italian Federation for Energy Efficiency, FIRE:

- We talk a lot about smart meters, but we need to change behaviours. We need to change the way we live, change our mindset for decarbonisation.
- Energy efficiency is cost effective, but it is unattractive, it is not easy to communicate, it is complex, it affects existing assets, it is not a core business, therefore not a priority.
- Why do some invest in energy efficiency? Because some people really care about environment, in some cases they just have good leaders, other people simply do what they are obliged to do, while some other people look for incentives.

Anna Moreno:

- The issue with energy efficiency is the lack of schemes, for every bad experience you need thirteen good experience to change the attitude.

Monica Frassoni:

- The usual narrative of the Italian government is “we did well, and we are very advanced compare to others”, but this is not true. To beat the narrative, we need to present facts.
- In Italy there is unspent money in energy efficiency, and this fact could be used as a narrative.

Dario Di Santo:

- People need to understand the benefits of energy efficiency and to have the financial tools to do this.

Paolo Bertoldi:

- Talking about success stories does not work, we need to transform our economic system.
- We need the support of the Italian Parliament and local authorities to make it work.

Monica Frassoni:

- The money is there, but there are lot of barriers around it.

Paolo Bertoldi:

- In Italy, an incentive can be a tax deduction and still you do not see many.

Anna Moreno:

- We have sold the wrong messages to the users, we should say more that improving energy efficiency means improving the quality of life. We can explain that you can improve the quality of air in your apartment, and this has always been considered a side effect but the side effect is actually the fact that you decrease the electricity bill.
- Sometimes you design a nearly zero-energy building, but sometimes it is not true because the design is wrong.
- The public administration is not ready to manage this innovation.
- If the demand side is not ready, even if you improve the offer, the demand does not understand what you are offering to them. Training is necessary. Municipalities are not ready for this innovation.

Dario Di Santo:

- Italy has money to do the necessary innovation, but the money is not labelled for energy efficiency usage.
- We need to have good market operations and information. The information that citizens and companies receive it is not enough to enable consumers to manage this type of intervention.
- The young people can be the right facilitators.

Paolo Bertoldi:

- In efficiency we are struggling already for a 32,5 % target of efficiency and to increase this target represents a huge challenge but also a necessity.

Dario Di Santo:

- We need new business models with changing behaviour, if we succeed in delivering new business models that could be applied worldwide.

Conclusions and key themes for narrative development

The event provided a good overview of the current situation in Italy and of the government's vision for future energy efficiency measures and its perception by key experts. Overall, speakers agreed on the necessity of having more ambitious targets on energy efficiency but especially on having concrete measures, such as financial and economic incentives for companies and users to reach the established targets. From the inputs and discussion, the EU clearly emerges as an important driver for action towards decarbonisation in Italy. Key themes participants alluded to regarding action on energy efficiency comprised:

- The need to secure affordability and accessibility of energy for households, also considerations of energy poverty
- The role of funding and financing, the potential of using unspent funds and the need to earmark sufficient funding for energy efficiency measures
- The magnitude of societal action needed for the carbon-neutral transformation and for meeting ambitious targets, also regarding the role of individuals e.g. for behavioural change, local authorities and businesses; as well as the need for training
- The important role of the private sector and the need to maintain competitiveness
- Different drivers and motivations to engage in energy efficiency, from environmentalism, mandatory requirements, economic incentives or other benefits such as improved air quality

Danish National Parliamentary Workshop

Event summary

The virtual parliamentary workshop for Denmark took place on 29 May 2020 and discussed the topic of *The Green Deal and the National Energy and Climate Plans: The Danish Green Vision*. The workshop was organised by EUFORES in close co-operation with Anne Paulin, Member of the Danish Parliament, and Niels Fuglsang, EUFORES Vice-President/ Member of the European Parliament. The event was attended by 34 participants, including Members of the Danish Parliament, representatives from national ministries, the European Commission, national energy agencies and select scientific and industry representatives.

During the conference, attendees shared views, thoughts, and suggestions on how to accelerate the green energy transition, taking into consideration the ambitious targets of the Danish Government and the current COVID19 crisis. Speakers presented the vision of the Danish government on how to implement the targets included in the NECPs and how to

introduce more ambitious and climate targets going forward. Speakers presented the multiple benefits of energy efficiency and renewable energy and the different legislative and financial tools introduced over the past years. The open discussion was focused on sharing different perspectives on how to make energy efficiency more appealing and socially accepted among Danish public authorities, businesses, and citizens. Several speakers agreed on the need to share Danish ambitious targets at EU level, deepen the common European energy market and foster standards and creating a level playing field among Member States.

Input collection

Mogens Lykketoft, fmr MP, Finance Minister, Foreign Minister and President of the UN General Assembly:

- Climate action is most urgent, and energy policy is at the core of climate action.
- We must change the way of production and consumption; it is important to avoid catastrophes for our children and grandchildren.
- In Denmark we started the discussion on growth and quality already in 1970. In 1990, when I was Minister of Finance, we introduced green packages to limit the use of gasoline. At the same time, we invested in climate action. The share of renewable energy sustainability supply is very high compared to the European average, and we have been good on decoupling growth from emission outputs. We have a very ambitious government right now which established the target of a 70% emissions reduction for 2030.
- Post-corona policy is a golden opportunity to speed up the green energy development. We have more money that we use to promote the sustainable employment in the future.
- One key aspect of the Danish experience is the interaction of government political decisions and economic employment and industrial development of our country.
- This transition does not need to be a painful one, we need a strong society that will be able to change their production and their way of living swiftly.

Anne Paulin, Member of the Danish Parliament:

- I will tell you how the Danish government plans to continue pushing Denmark as a frontrunner. At our elections last year, the environment has been a key concern for the voters. We have established the target of 70% of reduction of GHG by 2030, and the large majority of the Parliament supported this and sent a clear signal to industry.
- How will Denmark implement the ambitious climate targets? We started with doubling the funds for green development to make sure we will have the technology to achieve the goals. We came out with the Final Climate Action Plan, we want to bring offshore wind energy to the next level by creating two energy islands that will generate massive energy winds resources in order to be able to export our wind power to Baltic and North Sea area. We plan to have green transport fuels for heavy transport, the Scandinavian airlines announced a cooperation project around green hydrogen in the transport sector. We want to develop our district heating system to provide people with more green energy at home. We just concluded a big housing agreement to renovate the housing sector for 4 billion Euros. We want to focus on industry and electrify their processes to start using green gases and we have subsidies for the industries as part of our plan. We want to strengthen the recycling economy to have 80 % of plastic recycled by 2030 while today we are just at 20 %. We plan to introduce subsidies for CCS to make to scale up the technology. We hope to conclude climate plan negotiations by June and come back with new initiatives.

- Denmark needs ambitious collaboration in the EU, and ambitious targets of at least 55% greenhouse gas emission reductions by 2030 to be able to reach climate neutrality by 2050.

Niels Fuglsang, Member of the European Parliament, Vice-President of EUFORES:

- Denmark wants a strong EU energy policy, and an increase of the targets because the country has a lot of renewable energy, e.g. wind energy. Last year, more than 50% of electricity came from green sources, especially wind. Production exceeds consumption levels and with the two energy islands, they will be able to export their energy to other EU countries. For this, they need a strong grid infrastructure policy with grid standards, minimum standards on well-functioning of the grid and interconnectors.
- With the Corona crises, we need to invest in a green future, including the grid infrastructure. We must have a strong EU renewable energy policy.
- If we influence the EU and push for an ambitious EU, we can change the world.
- Multinational companies who want to operate in the EU must adapt to our standards because it is a massive market for them. The ETS system is an example, years ago we included aviation in the ETS system, and this influenced airlines all over the world who fly in Europe. The ETS is not ambitious enough as the CO2 price is too low, but it is an example of how we can change the rest of the world. We are a progressive force in EU, we can be a progressive change for the world. We need to sell our energy and we need an EU renewable energy market; we need to be able to sell jobs and technologies. The EU represents a chance for this.

Henrik Dam, Policy Officer, DG Energy, European Commission:

- The first legislative proposal of the European Green Deal was the Climate Law with an increased climate target to at least 55% of emissions reduction. If we look at the energy sector, the NECPs are being collected and updated now and we will be launching the smart mobility and renovation wave for buildings in 2020. By 2020, the European Commission will also work on an offshore energy initiative.

During Q&A

- If we want to reach the Paris Agreement targets and climate neutrality, energy efficiency will play a key role. In Denmark, we have become quite energy efficient. We started in the 1970s with combined power plants for district heating. We are moving away from coal, but the system is still there.
- First, we need to use the corona crisis to invest in energy efficiency. Parts of the Recovery Funds will be going to energy efficiency, we have to push on that.
- 2020 target 20% and 2030 32,5%, which is not binding and country specific it needs to be binding and country specific. We should have higher targets and country specific targets and binding targets.
- Concerning buildings, we do not renovate enough and not fast enough. We renovate at 1% per year, that is too slow. In Denmark we will spend 5 billion euros on energy renovating buildings, this is a fund saved by tenants that we can use for this. The corona package should be spent on green goals.
- We should reopen the energy efficiency directive with higher targets, and work on the building renovation wave of the European Commission.

Diana Barglazan, Policy Officer, Energy Efficiency Unit, DG Energy, European Commission:

- Two days ago, the European Commission proposed the recovery plan with updated plan for Multiannual Financial Framework.
- If a crisis is happening, we should take the opportunity to change things that were not working properly. It is a challenge but also a good opportunity.
- Buildings are a priority for the European Commission.
- Renewables and energy efficiency are two faces of the same coin.
- We need a huge amount of investments, 200 billion euros per year of budget gap. Large part is linked to energy efficiency in buildings. We need to find right solutions for financing energy efficiency.
- At the European Commission, we are looking at how to use public funds to trigger private funds. Reducing perceived risk on energy efficiency. We need to scale up what we do. We have the Green Deal and there are many initiatives around energy efficiency such as the renovation wave. We have a sustainable action plan; energy efficiency is a component.
- Energy efficiency is financed by the H2020 programme, the Elena facility, European Fund for Strategic Investment and more.
- Recovery Fund: clear commitment from the Commission to have the funds for the green energy transition. Member States should use the funds to invest on the priorities identified. For building renovation, invest EU received additional funding. Member States can use recovery and resilient facility for this purpose as well.

Katrine Bjerre M. Eriksen, Director, Synergj:

- To reach the Paris Agreement, we need both renewables and energy efficiency.
- As part of reaching the 70% target, the government has sent a proposal for climate and energy. Current renovation need is estimated to be 70 bn in Denmark. It is not only about the climate, but also about the health of our kids at school and people at offices.
- We need to warm up the market for the private sector investors, the public sector will not have enough funding for renovations on the building sectors.
- Is important to look at EE from job creating prospective, based on estimations 22 million of jobs will be created by 2050.
- Targets must be binding.

Charlotte Gjedde, Senior Project Manager, Energy and Energy Efficiency, State of Green:

- In Denmark, we have been able to decarbonise growth with reducing CO2 energy and water consumption.
- We should focus on buildings because we have a lot of solutions available right now.
- Right now, the Danish government has focused on how to use renovations to boost the economy in Denmark and create jobs.
- Companies on renewables and energy efficiency in Denmark are now joining forces and working together more than never together.

Helle Agerdal Olsen, Head of Division, Energy Efficiency, Danish Energy Agency:

- Danish Energy Efficiency Obligation Scheme has been in place for several years. It is a scheme based upon a voluntary agreement between the government and the utility companies. All companies have individual target to meet every year, they can underperform one year but have to overperform the other year. All sectors have fulfilled their targets by the end of the year. This year is the last year of the energy efficiency obligation scheme in Denmark. The Energy

Agreement of 2018 was supported by all parties to replace the obligation schemes with new schemes. We are working on how the schemes will be decided. Three schemes are foreseen for the period 2021-2024 period.

Lukas A. Lausen, Public Affairs Manager, Danfoss:

- Investments in energy efficiency are the most cost-effective ones. Energy efficiency is not only about buildings, but also for the industry. Energy industry is responsible for 20% of the emissions. We can go behind of what we have right now if we have the right political tools.
- One of the big barriers is taxation of excess heat or waste heat. Other barriers are the block of investments on the building sector; much renovation is needed.
- Sectors integration is necessary and should happen on the political field, on the governmental administrative level more.

Signe Munk, Member of the Folketing, The Socialist People's Party:

- We need to make sure that every building owned by public institutions has a renovative rate. We need to help Danes to save energy by providing subsidies and creating energy saving funds, to get cheap loans when they invest on energy efficiency technology. Energy efficiency is an important part of the energy transition and at the moment we are not doing enough.
- The 'not-in-my-backyard' phenomenon is a challenge we are currently facing; we hope that the new legislation will help.
- In Denmark, we managed to create new jobs on academic level and on the phase of production. We have good companies such as Danfoss. We will create new jobs in creating windmills and solar panels and we can show in practice that we are creating jobs for regular people on the same time that we are saving the world.

Carsten Kissmeyer, Member of the Folketing, The Liberal Party:

- The liberal party is also committed to reduction targets, but we have to do it on a way that is efficient and takes in consideration jobs. Keep the jobs, make things efficient and the production attractive for customers. We can be competitive and efficient on same time.
- The green taxation in Denmark is not at all green. The fiscal element is very heavy. I agree that is necessary to find a new way.
- There are great health benefits from having green and renovated building. Increasing indoor climate improves our productivity, same applies for kids at school. For house owners and tenants, they can also benefit from energy efficiency by decreasing energy related cost, same for companies.
- EE potential is very high in Denmark, but financing is missing.
- Denmark is really a frontrunner on energy efficiency. On narratives building, the core narrative rests on the conscience that it is good for us. It is crucial to get everybody on board.

Lukas A. Lausen, Public Affairs Manager, Danfoss:

- Ambitious governments need to support the industry with the right regulatory framework. A lot of changes are coming from the industry itself who then ask the politicians to set the proper legislative framework. High targets for RES and EE have great benefits, but the solutions come out of the creativity of the consumers, industries, and the market. Other issue: we have a lot of the technologies out there, and we have customers who want that technology, but it is not financially viable. All the taxation (waste, heat, etc.) is based on a very old thinking of extra waste or extra heat. We need to look at this in a very broader way and from energy producing perspective.

Conclusions and key themes for narrative development

The event provided a good overview of the current situation in Denmark and of the government's vision for future energy efficiency measures, notably in the context of Denmark's National Climate and Energy Plan, the European Green Deal and recovery and resilience action. Overall, speakers agreed on the need for ambitious targets at EU level based on the Danish experience and highlighted the relevance of the EU for establishing a level playing across Member States to stimulate the economy with aligned policies and standards. Key themes participants alluded to regarding action on energy efficiency and the carbon-neutral transformation in general included:

- Historically, Denmark's strong track record since its early decision to invest in the development of renewable energy and efficiency measures in reaction to the oil crisis in the 1970s and the related development and leadership in sustainable technologies such as in the wind power sector, with renewables and energy efficiency considered as 'two faces of the same coin'
- The productive interaction of ambitious policies, industrial development and industries in turn asking for increased policy ambition, informing the perception of Denmark as a frontrunner for pioneering the transformation
- Key role of considerations for industrial development, competitiveness and employment as a driver for sustainable policies, feeding into a broad societal backing of ambitious renewable and energy efficiency policies
- Also, non-economic benefits of efficiency measures such as improved indoor environmental quality in healthy and efficient buildings
- The importance of securing the funding and financing needed considering the scale of the carbon-neutral transformation
- intergenerational perspectives on climate action and broader contributions to 'save the world'
- The important role of the EU to provide a level playing field and to enhance market integration to allow technology and energy exports

Finnish National Parliamentary Workshop

Event summary

The parliamentary workshop for Finland took place on 20 September 2020 and discussed the topic of *The National Energy and Climate Plans & the EU Recovery Plan: The Finnish Green Vision*. Organised by EUFORES, the event focussed on the Green Deal, the EU Recovery Plan and the National Energy and Climate Plan in Finland. Members of the Finnish and European Parliament, government officials, representatives of the European Commission and experts in the field shared their experiences and discussed the energy transition progress in Finland.

Input collection

Session 1 opened the workshop with inputs on renewable energies and energy efficiency as green elements of the Finnish Recovery Plan.

Terhi Lehtonen, State Secretary, Ministry of Environment and Climate Change of Finland

- To tackle climate change, we need investments for better technology, ways of production and transport.
- The Finnish government committed in May to designing economy recovery measures in line with the 2035 climate neutrality and circular economy goals.

- The government has implemented €1.5 billion worth of measures this year – some include: increasing subsidies for energy efficiency, subsidies for wood construction, renewable energy subsidies, replacement of oil heating, nature reserves, forests etc.
- Approximately half of the estimated €2.3 billion EU funding to be committed in 2021-2023 will be dedicated to the green transition.
- Finland’s target is to become climate neutral by 2035.

Saara-Sofia Sirén, MP Finland, Chair of the Energy Reform Group of the Finnish Parliament

- The green recovery package should direct funding for this matter to support a green and smarter rebuilding. For this reason, funding should be spent on decisions that will reduce CO2 emissions.
- It is vital to invest vast amounts into renewables and green technologies because this will be the main vehicle for sustainable growth.

Session 3 on “EU Energy Efficiency Policy Implementation in Finland and the upcoming Renovation Wave” discussed success stories on the implementation of energy efficiency policies in Finland and good practices to stimulate investments in building renovation. The session aimed at exploring the conditions and argumentative drivers for effective efficiency policies.

Daniel Becker, Director at Guidehouse

- With the Energy Efficiency Watch projects, since 2006 we have been examining energy efficiency policies across all Member States.
- In some countries, instruments work well because there is broad societal acceptance, a positive narrative that supports implementation.
- There is a momentum to change the scene, positive narratives are needed to make the Green Deal and the Recovery Plan for RES and EE work. How can we convince influential groups to make them believe in the change?
- As a result of the Energy Efficiency Watch programme, we are collecting examples for stories and narratives that have worked.

Päivi Laitila, Head of Energy Efficiency Unit, Motiva Oy¹

- Päivi Laitila discussed how to stimulate investments in building renovation and presented key vectors, including energy renovation subsidies, incentives for switching to low-carbon heating, information and advice, low carbon roadmaps and energy efficiency agreements as well as capacity building.
- In sum, we have many means to promote energy efficiency and the renovation of buildings.
- There are some strategic goals in climate and energy policy that will help us achieve our targets. The long-term renovation strategy brings out a wide scope of views on renovation, its ways, means, and needs. It meets Finnish needs while complying to the EU directive’s requirements. It aims at reducing buildings’ GHG emissions by 90% and increasing the share of nearly zero-energy buildings from 10% over 90% by 2050.
- Sectoral low carbon roadmaps and energy efficiency agreements are drivers of renovation action.
- Agency’s activities are key for acceptance

Session 4 facilitated a discussion with Members of the Finnish Parliament and Members of the European Parliaments on enabling factors and barriers for Finland’s Energy Transition and

¹ PowerPoint presentation available at:

[http://www.eufores.org/fileadmin/eufores/Events/National_Parliamentary_Events/Finland_2020/11.00 - 11.10 Presentation Paivi Laitila - Session 2.pdf](http://www.eufores.org/fileadmin/eufores/Events/National_Parliamentary_Events/Finland_2020/11.00_-_11.10_Presentation_Paivi_Laitila_-_Session_2.pdf)

implementing a Green Recovery Plan.

- transformation in the peat sector: attention to 'just transition' required, as 2,000 jobs involved => not take away overnight but manage smart conversion, create clarity on perspectives
- Innovation: a lot to do / gain, impressive approaches e.g. on district heat, building efficiency => in favour: positive attitude of the Finnish
- Avoid putting up technological barriers for innovation
- Generally high economic potential for greening the economy
- Sector by sector approach needed, considering regional differences
- Private financial engagement / investment needed, 1) from a financial perspective, and 2) for the societal buy-in
- Organize transfer from massive public spending towards solid business cases which attract private investment
- Urgently avoid stranded assets and mismatches through clear upfront communication
- Pay special attention not to create another permanent subsidy case

Conclusions and key themes for narrative development

The event provided a good overview of the current situation in Finland and of the government's vision for future energy efficiency measures, notably in the context of Finland's National Climate and Energy Plan, the European Green Deal and recovery and resilience action. Finland has proved to be very ambitious with their targets to become climate neutral by 2035, 15 years earlier compared to the EU's target. There seems to be a general agreement that the Renovation wave is necessary and important to achieve the Finnish goals. Key themes participants alluded to regarding action on energy efficiency and the carbon-neutral transformation in general included:

- Benefits of having clear and ambitious targets and strategies for decarbonising the economy
- Scale of funding and investments required for the transformation
- Productive interaction of complementary measures e.g. regarding regulation, financing, information and capacity building, for instance in the buildings sector
- Sectoral low carbon roadmaps and energy efficiency agreements as key instruments
- The generally positive attitude on innovation and the concrete chances of transformation related economic benefits were highlighted, while not forgetting the need for a just transition

Task 3.3: Survey

Deliverables:

- **D 3.3 Survey Report**

Full Access to the Survey Report and MS results: [EEW4-survey-report.pdf \(energy-efficiency-watch.org\)](#)

- **D 3.4 Powerpoint presentation on survey**

Full Access to the Powerpoint presentation: [PowerPoint-Präsentation \(energy-efficiency-watch.org\)](#)

- **D 3.5 Survey summary**

Full Access to the Survey Summary: [EEW4-survey-summary.pdf \(energy-efficiency-watch.org\)](#)

Task 3.4: Business stakeholder workshops

Deliverable: D 3.4 Business Stakeholder Workshop Event Reports

01/2020: Germany: Narratives for an efficient energy transition

<i>Title of the event:</i>	National Business Stakeholder Workshop, Germany: Narratives for an efficient energy transition
<i>Date & location:</i>	28 January 2020, 9:00 – 12:30 hrs, Ørsted Office, Hamburg
<i>Organiser(s):</i>	Navigant, supported by Deutsche Unternehmensinitiative Energieeffizienz e.V. (DENEFF)
<i>Number of Participants:</i>	24
<i>Summary of the event</i>	<p>The first EEW4 national business stakeholder workshop took place on January 28 in Hamburg, Germany, in collaboration with the DENEFF, a non-profit energy efficiency initiative. The event was moderated by Carsten Petersdorff, Director at Navigant. In three break-out groups and a vivid plenary discussion, prevailing narratives used in the energy efficiency business community were discussed and novel narrative elements have been developed. From the input received, the EEW-analysis team identified narrative elements with potential to be further developed.</p>
<i>Event evaluation</i>	<p>The event received positive feedback from participants and collaborators for the concept and organisation. The workshop concept was understood and has been picked up with interest by the audience, especially the opportunity to transmit feedback from the business community to decision makers through the project has been welcomed.</p>
<i>Objective & main programme point</i>	<p>The aim of the workshop was to collect input on existing narratives around energy efficiency and to receive input from business stakeholders with a view to developing narratives for enabling the effective implementation of energy efficiency policies and measures in the EU.</p>
<i>Input Collection</i>	<p>The business stakeholder workshop revealed that mainly quantitative and economic narratives are being used in the current debate on energy efficiency policies and measures, e.g. regarding reductions of energy consumption, emissions and energy costs. Business stakeholders do not perceive it to be easy to translate key benefits into comprehensive or appealing narratives. The energy efficiency business community would consider it helpful to receive guidance on how to translate efficiency benefits into stringent narratives that resonate with key stakeholders. From the input received, the EEW-analysis team identified the following storylines with potential for further development:</p> <ul style="list-style-type: none">• Energy efficiency is part of the new generation's lifestyle that embraces environmental awareness, health and new technologies. This provides opportunities to connect energy

efficiency with the benefits of the new lifestyle, e.g. home office implying less traffic and more available office space and comfort, no commuting time, etc. Energy efficiency is something everyone can do and could be contextualised as a bottom-up movement.

- **Freedom as the absence of regulation** - this widely shared counter-narrative often seems to hamper policy makers in taking necessary decisions for climate action and energy efficiency. An enabling narrative could be developed to illustrate the benefits of regulation for the purpose of climate protection in general and for energy efficiency in particular, such as: Today, freedom is commonly seen as the absence of regulation. However, the current lifestyle causes emissions that will limit our freedom in the future. Each day that we do not change our current way of living, e.g. by decreasing our carbon footprint, will further restrict our freedom in the future. Forward-looking regulation that reduces future-threatening behaviour as early as possible allows us to preserve our freedom also in future. Policies and regulation should therefore encourage and incentivise environmentally friendly behaviour and limit action that restricts our future freedom.
- In Scandinavia, regulatory measures in energy and climate policy are common and mutually accepted. Narratives used there could serve as a model for positively framing regulatory measures in the context of energy efficiency.
- Contextualising energy efficiency as the **conservative pillar of the energy transition** by linking energy efficiency to pecuniary savings and preservation can appeal to certain conservative parts of society.
- By their nature, energy efficiency projects typically promote **local value creation**, jobs and other benefits especially for small- and medium-sized business and refurbishes the infrastructure. This can therefore be highlighted as an opportunity especially for rural communities.
- Energy efficiency allows **stable return on investment in times of zero interest rates**.
- The communication by the European Commission of the Green Deal as Europe's man-on-the-moon moment was widely and positively received by the energy efficiency business community.

<i>Title of the event:</i>	National Business Stakeholder Workshop, Italy: Business perspectives on energy efficiency policy
<i>Date & location:</i>	Online event: - First session: 27 April 2020, 15:00 – 17:00 - Second session: 28 April 2020, 10:00 – 12:00
<i>Organiser(s):</i>	Navigant, supported by the Italian Federation for Energy Efficiency (FIRE - Federazione Italiana per l'uso Razionale dell'Energia)
<i>Number of Participants:</i>	32
<i>Summary of the event</i>	The second EEW4 National Business Stakeholder Workshop gathered over 30 participants from Italy and was held in two interactive sessions on April 27 and April 28 as a virtual meeting due to COVID-19 health restrictions. The participating business representatives and energy auditors shared their insights and discussed on how to make progress on energy efficiency and how to make efficiency policies a success. The event was organised in collaboration with the Italian Federation for Energy Efficiency (FIRE), an independent non-profit organization for promoting sustainability and the efficient use of energy. Daniel Becker from Navigant, a Guidehouse company, presented the results of previous EEW projects, the methodology and workplan of EEW4, and the role of narratives in policy implementation. Dario Di Santo from FIRE underlined the importance of highlighting non-energy benefits in the communication of energy efficiency policies and measures to increase awareness and acceptance also beyond the energy sector business society. The input received through the workshop will feed into in a case study report by the EEW-analysis team to be published on the Energy Efficiency Watch website.
<i>Event evaluation</i>	In the light of the COVID-19 pandemic, this workshop was the pilot for an interactive online format for the EEW Business Stakeholder Workshops. The event received positive feedback from participants and collaborators for the concept and organisation of a virtual format that allowed for a vivid exchange in times of social distancing restrictions in Italy and Europe. Breakout sessions, polls and live notes were used as tools to accompany the discussions. The concept for this interactive online workshop concept worked well and has been picked up with interest by the audience. The discussions delivered valuable input that will be condensed in one of the EEW case studies.
<i>Objective & main programme point</i>	The aim of the workshop was to collect input on existing narratives around energy efficiency and to receive input from business stakeholders with a view to developing narratives for enabling implementation of energy efficiency policies and measures in Italy and the EU.
<i>Input Collection</i>	Italy's White Certificate Scheme is complex but worked very well after a few years as reported during the Business Stakeholder Workshop. Success factors have been good information, a training system and the role given to ESCOs to act as facilitators for energy efficiency measures. Narrative elements for potential case study

Predictability in the costs and benefits is key to stimulate businesses' interest in investing in energy efficiency measures

- The implications of energy efficiency measures should be explained in monetary terms instead of energy values to convince decision makers. Highlighting economic benefits of improving energy efficiency is essential.
- Often, decision makers are not aware of the full benefits and cost savings that come with the implementation of energy efficiency measures.
- Energy is often a central cost factor for businesses, industries and public services but still energy efficiency is not a priority, e.g. due to sometimes long payback periods or perceived complexity of proposed measures, among SMEs in particular.
- There are plenty examples of cost-effective energy efficiency measures and of solid business cases. Business decisions for energy efficiency measures are not entirely determined by economic rationales and should therefore be encouraged with convincing arguments.
- Establishing long-term relations is essential for ESCOs to reduce the cost risks of clients, e.g. through energy performance contracting and by including success fees, internalising external costs in energy prices and balancing costs of electrical and thermal energy.
- Focus on the client perspective as a policy maker or ESCO: monitoring energy performance and key performance indicators allow for process improvements, e.g. in production. Communicate measures for the support of energy efficiency investments to reduce payback time. Highlight effective business models.

A holistic and persistent view on energy efficiency is needed

- Energy efficiency services need to be differentiated and tailored to broad range of use cases.
- Non-energy benefits of energy efficiency should receive more attention in the communication of energy efficiency
- The implementation of innovative and energy efficient processes can contribute to a company's positive image, e.g. quality improvements through digitalisation and automation.
- Energy efficiency policies and measures do not have a negative impact on the company in terms of outages.

More and new formats for communication between stakeholders and policy makers are necessary

- Most of the people do not know that particular energy efficiency instruments exist, e.g. low-cost loans in Italy. Policy makers and business stakeholders need to improve the communication to increase awareness on these instruments.
- Energy efficiency is not in need of protective policy measures but needs recognition in political and public debate.
- A dialogue between industry, policy makers and ESCOs is necessary to rebuild mutual trust.

A level playing field and predictable instruments are necessary to support the private sector in developing new business models

- Investment support is essential for reaching ambitious energy efficiency targets
- Incentives, audits and communication are useful instruments to increase awareness for energy efficiency
- Energy efficiency policies are needed, particularly for non-energy intensive industries. Energy efficiency should be connected to policies for digitalisation (e.g. Industry 4.0 programme) and innovation. Supporting measures for energy efficiency & innovation should be combined / synergies strengthened.
- Support capacity building for energy management in SMEs

05/2020: Ireland: Business perspectives on energy efficiency policy

<i>Title of the event:</i>	National Business Stakeholder Workshop, Ireland: Business perspectives on energy efficiency policy
<i>Date & location:</i>	Ireland (online event), May 6
<i>Organiser(s):</i>	Navigant supported by the Tipperary Energy Agency (TEA)
<i>Number of Participants:</i>	9 participants
<i>Summary of the event</i>	The third National Business Stakeholder Workshop took place in Ireland on 6 May, organised by Navigant in collaboration with the Tipperary Energy Agency (TEA). In the discussions with the participants from diverse areas of the Irish energy efficiency business community, profitability and cost aspects have been identified as predominant narrative elements to win over the private sector in Ireland for energy efficiency. Stakeholders further pointed out that robust monitoring and verification of measures play a key role for showing the broader relevance of energy efficiency for profitability. Mandatory corporate carbon reporting has been suggested as a lever to further increase awareness and incentivise energy efficiency measures in companies. Daniel Becker, Director at Navigant, a Guidehouse company, moderated the workshop and spoke on the role of narratives in policy implementation and the Energy Efficiency Watch methodology and

	<p>workplan. Paul Kenny, CEO at TEA, gave an overview on energy efficiency policy in Ireland and the related work of his organisation. The workshop was organised as an online event in the light of COVID-19 health restrictions.</p>
<p><i>Event evaluation</i></p>	<p>The Irish Business Stakeholder Workshop was a pilot for an interactive online format with a selected group of participants with one focused session for the stakeholder discussion. The limited number of participants allowed for a profound exchange. Discussions were very fruitful but did not gain the same momentum as in live events with broader participation. For subsequent online workshops, it will be preferable to limit the duration of the highly interaction-based online events to around two-hour sessions to maintain focus and engagement. Content-wise, the discussions and insights from the Irish stakeholders delivered valuable results which are envisaged to inform a case study that explores the potential of energy efficiency to become a key vector of profitability.</p>
<p><i>Objective & main programme point</i></p>	<p>The key aim of the workshop was to receive input from the business community for analysing prevailing storylines around energy efficiency and collect ideas with a view to developing resonating narratives to promote the effective implementation of energy efficiency policies and measures in Ireland and in the EU.</p>
<p><i>Input Collection</i></p>	<p>Key statements from the participating business stakeholders:</p> <ul style="list-style-type: none"> • Energy efficiency is often perceived as being an expensive and complex matter. Many companies and households are sceptical because energy efficiency solutions were sold with wrong promises in the past, e.g. unrealistic payback periods. Potential clients of energy services often feel that <i>it is easier to do nothing</i> than implementing energy efficiency measures. • Energy efficiency needs to be thought from a cost perspective rather than from an energy perspective. Monetary savings matter for clients, not carbon emissions or energy use. • When offering energy services, clients should be challenged: <i>Everybody knows that energy consumption must be decreased in future, ask what they are doing.</i> • Irish homes are typically privately owned and often quite new, renovation is thus not a priority topic in Ireland. • Commercial clients can be convinced by explaining that early investments in energy efficiency lead to earlier and continuous savings in future, long payback periods however are a problem. • SMEs miss ESCOs offering services to them, support schemes might not be attractive enough. • Energy audits are a chance to create client relations and to reveal unknown energy efficiency potentials. Stakeholders suggest that energy audits should be combined with an

obligation scheme for closer relation and constant exchange between companies and auditors.

- **Integrate energy deeper into organisation's procedures**, e.g. on board-level and in finance departments. Carbon disclosure can be a lever to increase awareness for energy in organizations.
- **Government recognition** is important for the success and positive reception of energy efficiency solutions.
- **Innovative energy efficiency business cases** need to be developed and linked to comfort improvements: *People pay for convenience.*

Joint conclusions

- **Grants and tax breaks** smartly **coupled with effective measures** support implementation.
- **Long-term stable policy instruments** that improve over time are needed, e.g. carbon tax with effective and long-term predictable price level.
- Energy efficiency should be framed as a chance to decrease costs for gaining a **strategic advantage** in the long run. Energy savings are a contribution to profit and image.
- **Mandatory corporate carbon reporting** modelled on Art. 5 EED can be a lever to increase awareness for energy efficiency in companies, e.g. at board level and in finance (Swedish example)
- **Monitoring and verification of measures** play an important role for showing the broader relevance of energy efficiency for profitability.
- Energy efficiency decreases **energy import dependency.**

Potential narrative elements

- **Profit and cost aspects** are the overarching argument for energy efficiency in Ireland. Connect energy efficiency with profitability and image not with savings: *there is money in this; ego or wallet.*
- **Climate change** creates a necessity to deal with carbon and energy, better early than too late to increase the profit from energy cost savings.
- Successful narratives need to address **the head and the heart** and include relevant examples and stories tailored to audience.

Potential case study

- Making energy efficiency a key vector of profitability
- Profitability assessment; profitability is also driven by image and perception of a company

05/2020: Slovenia: Business perspectives on energy efficiency policy

<i>Title of the event:</i>	National Business Stakeholder Workshop, Slovenia: Business perspectives on energy efficiency policy
<i>Date & location:</i>	27 May 2020, 15:00 - 17:00 CEST & 28 May 2020, 10:00 - 12:00 CEST; Slovenia (virtual meeting)
<i>Organiser(s):</i>	Navigant supported by Energap
<i>Number of Participants:</i>	16
<i>Summary of the event</i>	<p>The Business Stakeholder Workshop set out to discuss the enabling factors for successful energy efficiency measures and policies in Slovenia. Gathering Slovenian business stakeholders from a broad range of sectors including energy services, utilities, transport and the buildings, the interactive workshop was held in two consecutive online sessions due to the health-related restrictions of the COVID-19 pandemic. Starting with an introduction to the Energy Efficiency Watch project and aims of the workshop, Daniel Becker from Navigant led through the Workshop, supported by Vlasta Kremlj from Energap, the Energy Agency of Podravje in Slovenia. Participants reflected on effective arguments to make the case for energy efficiency with regards to different actor groups in Slovenia. Arguments and challenges highlighted with regards to businesses and investors:</p> <ul style="list-style-type: none">• Reducing operating costs and improving competitiveness are key drivers for investing in energy efficiency.• Improving energy efficiency in production processes can also improve product quality (example: optimising temperature levels and ventilation in pharmaceutical plant)• A holistic perspective is needed on overall energy use and production processes. ESCO-type offerings typically require engaging company as whole to include board, finance and technical experts.• Social responsibility/ performance in sustainability is an additional incentive for energy efficiency measures e.g. for certain owners/investors as it can be leveraged as an asset through PR.• Innovation benefits of energy efficiency not always recognised. <p>Arguments and challenges highlighted with regards to authorities and decision-makers:</p> <ul style="list-style-type: none">• Appealing to political/ PR benefits of energy efficiency measures can be key vector, notably vis-à-vis local decision-makers (example: esthetical appeal of renovated buildings in a town).• Consultation or dialogue formats between local authorities and stakeholders are not structurally implemented in the political processes; examples where cooperation takes place in working groups. Overall, implementation often remains a challenge, key is to receive political backing.• Local energy plans are key instruments to drive the energy transition and fulfill national and EU targets, but often lack commitment and budget

needed for investments to drive change (e.g. for developing district heating networks, expanding CHP/ waste heat recovery).

- Advances in building's efficiency are hampered by insufficient expertise of renovation contractors, capacity building programmes for constructors and renovation contractors are needed to increase the effectiveness of energy efficiency investments.
- Biomass energy from wood and timber production have potential for development; significant wood exports for heating but little processing, also a matter of competitiveness vis-à-vis industries in other Member States. Linking concessions for forestry exploitation to conditionality for investment in timber processing capacities suggested as a lever to develop timber industry for more local value creation; need for the right incentives.
- For biomass heating, would need to address bad image as polluting. Switch from wood-based heating towards RES-based heating e.g. using heat pumps to be advanced.

Arguments and challenges highlighted with regards to households:

- Shifting to electric vehicles (EV) often triggers holistic reflection of energy use and sources by households and enterprises, e.g. leading to installing PV systems to feed private charging infrastructure and buildings. Strong battery research in Slovenia, potential for local production of EV.
- Strong government narrative emphasising provision of social welfare and 'leaving no one behind' found to impede somewhat the debate on and recognition of energy poverty as an issue, further hampered by unclear definition.

*Input
Collection*

The second session of the workshop started with a brief presentation on the role of narratives for policy implementation after which participants consolidated their input and recommendations on ways and potentials for an effective implementation of energy efficiency policies and measures in Slovenia, complementing the points raised in the first session, including inter alia:

- Leverage dialogue formats to build trust between 1) businesses and energy service providers, 2) decision makers and stakeholders
- Embed energy efficiency as a centerpiece in the industrial strategy and develop a smart combination of innovative technologies (e.g. storage, EV, local production, etc.) that connects with the existing industrial structure
- Use pilot projects and involve local communities to improve acceptance of energy projects as there is increasing interest in self-consumption, energy autonomy etc.
- Enhance opportunities for mutual learnings with and from other Member States through partnerships and European projects
- Promote easy access to energy data for consumers (good example: portal on EV charging stations)

	<ul style="list-style-type: none"> • Have a policy design that makes energy efficiency the best/ easiest choice, e.g. as done with required energy performance levels for building renovation grants. Bad example: initial lack of energy performance requirements for furnaces. • Increasing investments needed in Slovenian electricity grids also opportunity for prioritizing efficient energy use and develop demand side management solutions. • Expand educational programmes and incentives for stakeholders and broader public, e.g. in form of company programme to reward the best diplomas in the field or competitions rewarding change of individual behaviours. New technologies such to be made desirable beyond cost arguments, e.g. through campaigns/marketing to create appeal or convenience (e.g. link mobile app with smart meters)
<i>Objective & main programme point</i>	The aim of the workshop was to collect input on existing narratives around energy efficiency from business stakeholders with a view to support the effective implementation of energy efficiency policies and measures in Slovenia and in the EU. Insights from previous business stakeholder workshops also fed into the discussion. Participants were moreover invited to take part in the Energy Efficiency Watch Survey, introduced by the Energy Agency of Upper Austria.
<i>Event evaluation</i>	The workshop concept was well understood and picked up with interest by the audience. The opportunity to transmit feedback from the business community to decision makers through the project was particularly appreciated. Considering the online format of the event, an in-person workshop could likely still be more effective compared to virtual formats, especially when the primary focus is on gathering input through exchange and interactive discussions.

06/2020: Cyprus: Business perspectives on energy efficiency policy

<i>Title of the event:</i>	National Business Stakeholder Workshop, Cyprus: Business perspectives on energy efficiency policy
<i>Date & location:</i>	Virtual workshop: - First session: 15 June 2020, 10:00 – 12:00 - Second session: 16 June 2020, 10:00 – 12:00
<i>Organiser(s):</i>	Navigant, supported by the Cyprus Energy Agency (CEA)
<i>Number of Participants:</i>	42

Summary of the event

The National Business Stakeholder Workshop in Cyprus was held as an interactive online event in two consecutive sessions on 15 and 16 June 2020. Over 40 business stakeholders participated in the vivid discussions on effective energy efficiency policies in Cyprus and their success factors. The role of narratives in the debate on energy efficiency in Cyprus was the focus of the second session of the workshop.

In his welcome note, Savvas Vlachos, Director of the CEA, provided an overview on the progress of Cyprus in the field of energy efficiency. The transport sector represents the largest share in the total final energy consumption of Cyprus. The CEA sees the best opportunities for energy savings in the secondary (manufacturing) and tertiary (trade, commerce and services) sectors. Together, both sectors represent about 27% of the total final energy consumption which is about 4,000 GWh.

Further inputs were provided by the Energy Agency of Upper Austria from the EEW consortium to promote the Energy Efficiency Watch Survey and by the Cyprus Employers and Industrialists Federation (OEB). The workshop was moderated by Daniel Becker, Director at Navigant, a Guidehouse company.

Event evaluation

The online concept and invitation management for the virtual National Business Stakeholder workshops was further refined and received positive feedback from participants and collaborators. The workshop concept was well understood and picked up with interest by the audience. The opportunity to transmit feedback from the business community to decision makers through the project was particularly appreciated. Considering the online format of the event, an in-person workshop could likely still be more effective compared to virtual formats, especially when the primary focus is on gathering input through exchange and interactive discussions.

Objective & main programme point

The aim of the workshop was to collect input on existing narratives around energy efficiency and to receive input from business stakeholders with a view to developing narratives enabling the effective implementation of energy efficiency policies and measures in Cyprus and the EU.

Input Collection

Progress in energy efficiency in Cyprus

Since the first regulations for the improvement of the energy performance of buildings were introduced in Cyprus in 2007, Cyprus has seen progress in energy efficiency. Final energy consumption decreased from 2009 to 2014 but afterwards started rising again until 2017. In 2018, final energy consumption remained constant compared to 2017. The transport sector represents the largest share in the total final energy consumption of Cyprus. The CEA sees the best opportunities for energy savings in the secondary (manufacturing) and tertiary (trade, commerce and services) sectors. Together, both sectors represent about 27% of the total final energy consumption which is about 4,000 GWh.

According to a CEA business survey, energy saving measures in Cyprus have been implemented mostly in the areas lighting (>45% of respondents), Energy Management Systems (>40%), staff education

(>30%) and HVAC (>20%). Businesses expressed biggest interest in energy efficiency measures focusing on lighting (>50%), renewables (>35%), efficient HVAC equipment (>50%), efficient electrical appliances (>30%) and insulation (>30%).

Energy efficiency policies and measures in Cyprus

- Support schemes providing financial incentives play a key role in Cyprus. A **grant scheme** for SMEs and households linked with actual investments for energy saving renovations including heating, cooling and lighting has been successful in Cyprus. Even in case of short payback periods, little investments are expected from households if not supported by state incentives.
- **Subsidies for solar water heaters and thermal insulation** of roofs have been key drivers of the energy transition and efficiency with a high impact on savings in buildings, especially for the existing building stock. Financial payback periods of thermal roof insulation can be between 3-5 years without subsidies. Both support schemes have been well accepted by society and industry.
- **Trainings and education**, e.g. for installers of thermal insulation, have been another successful policy.
- For new buildings, **minimum standards** for thermal insulation and windows have been implemented successfully.
- Additionally, a **replacement scheme** has been offered to households and industry for substituting old fossil fuel-based boilers with heat-pumps or solar water heaters as well as for replacing windows or adding rooftop and wall insulation.
- Recently, a **VAT reduction** and **investment incentives** for households investing in the combination of PV with roof insulation were introduced.
- Self-consumption is incentivized by **net metering** and an **energy tariff reform**. Further energy efficiency potential is in **demand-side management** and **battery storage**, measures that should be promoted with new policies.

Recommendations of business stakeholders in Cyprus

Improve communication, marketing and education on energy efficiency

- More support and **communicative elements between local and regional authorities and the EU** are needed. EU policies are perceived to be a driver of change at national level. However, this is not always well communicated. In the public debate in Cyprus, the emphasis is often put on obligations, requirements, penalties etc. Stakeholder suggest that the European Commission

should improve the communication on EU initiatives and policies to put the focus more on chances and opportunities.

- Promoting **stakeholder dialogue with the right formats** is important to encourage exchange between all stakeholders. The public debate in Cyprus usually focuses on existing policies, especially on grants. Stakeholders are generally well aware of existing support schemes. However, not all stakeholders feel included in the same way in the policy process and consultations that tend to be dominated by policy, institutions and associations leaving out citizens. Communication formats need to be improved to increase the uptake of energy efficiency measures.
- **Marketing** for energy efficiency measures could be improved. It has been suggested to include people who deployed solar energy systems or implemented building insulation in promotion campaigns as “ambassadors” for their energy efficiency measure to spread awareness of the benefits, e.g. lower energy bills.
- Integrating environmental protection, sustainable energy and energy efficiency in **educational programmes** across all age levels is important to bring about lasting change. Politicians and other decision makers should be educated about energy efficiency on the challenges in the implementation but especially on the chances.

Reshaping energy efficiency policies

- **Governmental support schemes for energy efficiency** need to be reshaped and tailored to meet sector-specific needs, e.g. to energy-intensive SMEs, micro SMEs etc.
- **Procedures and bureaucracy** should be simplified as far as possible to make energy efficiency projects more attractive for SMEs and other businesses.
- Moving towards **market-based instruments** such as low-interest loans for energy efficiency measures to replace a successful grant scheme as required by the EU is perceived as a challenge. ESCOs could not yet find ground in Cyprus.
- **Insufficient lending** for energy efficiency measures is seen as an important barrier. Cypriot banks are not in the position to finance even small projects. Establishing an investment bank for supporting business development as well as capacity building programmes for the banking sector would help increase the uptake of energy efficiency projects.
- A bill that is currently being discussed in the Parliament for improving conditions for **social entrepreneurship** can be a

chance to enable the private sector, especially if incentives for energy efficiency services would be included.

- National/ regional innovation strategies for **smart specialisation** as part of the EU's cohesion policy are a useful tool to develop competitive industries – such as tourism or shipping in the case of Cyprus – and provide an opportunity to make energy efficiency part of economic strategies.
- Strategies and policies to improve energy efficiency in the **transport sector** are needed and should be implemented effectively in Cyprus. Stakeholders call for more pressure and support from the EU to proceed with energy efficiency in the transport sector.
- **Resilience** should be more prominent on the EU energy and climate policy agenda.

More engagement for energy efficiency from municipalities

- **Municipalities and local authorities** should play a more active role in driving energy efficiency in the communities. To give a positive example, public authorities should move first to implement energy efficiency measures and increase the engagement with local businesses.
- A bill that is currently being discussed in the Cypriot Parliament for a **reform of the local government** towards larger jurisdictions with more competences is a chance to enable the implementation of energy efficiency on local and municipal level.

Narrative elements for EEW case studies

- A **holistic view** on energy that includes its multiple benefits such as improved **health** is needed.
- **Energy poverty** has been named to be an issue in Cyprus that cannot be dealt with sufficiently due to the lack of financial and technical capacity in banks.
- **Bureaucracy** in public authorities is considered a key barrier to many projects and energy efficiency implementation. Procedures should be simplified as far as possible to enable households SMEs and other businesses to take energy efficiency measures.
- New business models need to be promoted that embrace the **economics of climate change** and consider the role of energy efficiency.
- The EU energy strategy contributes to **energy independence**, especially through expanding renewable energy production, which is welcomed by stakeholders in Cyprus. Imports of energy

carriers and raw materials should be decreased. Stakeholders pointed out interest in **circular economy** and an efficient use of local resources.

- Narratives and communication strategies highlighting the benefits of energy efficiency for the **tourism industry** would be of great value in Cyprus. COVID-19 can be a chance for the tourism sector to develop new business models. Image campaigns focusing on energy efficiency and sustainability could raise awareness for the topic, e.g. in the hotel and travel industry.

12/2020: Poland: Business perspectives on energy efficiency policy

Title of the event: **National Business Stakeholder Workshop, Poland: Business perspectives on energy efficiency policy**

Date & location: Online event:
- First session: 08 December 2020, 10:00 – 12:00
- Second session: 09 December 2020, 10:00 – 12:00

Organiser(s): Guidehouse supported by Polish National Energy Conservation Agency (KAPE - Krajowa Agencja Poszanowania Energii)

Number of Participants: 14

Summary of the event The Business Stakeholder Workshop for Poland set out to explore enabling factors for successful energy efficiency measures and policies, both on the national and on the EU level. A broad range of Polish stakeholders attended the workshop and participated actively in the virtual sessions. Narrative elements identified in previous Energy Efficiency Watch National Business Stakeholder Workshops were also fed into the discussion and reviewed with the participants. The joint reflection on enabling narratives for energy efficiency provided valuable input from the perspective of the Polish business community for the elaboration of the Energy Efficiency Watch case studies. Daniel Becker of Guidehouse led the interactive workshop, supported by Karolina Loth-Babut from KAPE, the National Energy Conservation Agency in Poland.

<i>Event evaluation</i>	The workshop concept was well understood and picked up with interest by the audience. The collaborative reflection and testing of pointed narratives delivered valuable input for the further elaboration of the Energy Efficiency Watch case study reports and will be intensified in the following business stakeholder workshops.
<i>Objective & main programme point</i>	The aim of the workshop was to collect input on existing narratives around energy efficiency and to receive input from business stakeholders with a view to developing narratives for enabling implementation of energy efficiency policies and measures in Poland and the EU. Insights and pointed narratives from previous business stakeholder workshops were tested and fed into the discussion.
<i>Input Collection</i>	<p>Narrative element and suggestions elaborated jointly with Polish business stakeholders during the workshop:</p> <ul style="list-style-type: none"> • Transparency: (e.g. predictability of energy market and price structures, transparent baseline data for policymaking, dialogue between stakeholders and government / meaningful public consultations & roundtables; clear benchmarks) • For effectiveness, combine regulatory policy with support programmes and information campaigns (e.g. energy advisors for Clean Air Programme, link audit obligations with audit support) • Develop one-stop shops (e.g. for energy renovation), address horizontal nature of energy efficiency and engage target groups; link it to EPC and ESCO schemes; preference for effective private business models. Need for ESCO guarantee. • Reliability (make savings visible; reliable audits; instrument design, realistic estimation of benefits; quality standards & clear rules and enforcement for energy audits) • Amplified view on costs and benefits (e.g. through guidelines for translating multiple benefits in economic/business terms) • Recognise horizontal dimension of energy efficiency measures. Need to establish joint platforms/ one-stop shops to address local needs, incl. automated online platforms.

03/2021: Lithuania: Business perspectives on energy efficiency policy

<i>Title of the event:</i>	National Business Stakeholder Workshop, Lithuania: Business perspectives on energy efficiency policy
<i>Date & location:</i>	18 March 2021, 10:00 - 15:00 EEST; Lithuania (virtual meeting)

<i>Organiser(s):</i>	Guidehouse, with support of the Lithuanian Energy Agency
<i>Number of Participants:</i>	24
<i>Summary of the event</i>	<p>The Business Stakeholder Workshop set out to discuss the enabling factors for successful energy efficiency measures and policies in Lithuania. Gathering Lithuanian business stakeholders from a broad range of sectors, the interactive workshop was held as an online meeting due to the restrictions related to the COVID-19 pandemic. Starting with an introduction on the Energy Efficiency Watch project and on the aims of the workshop, Daniel Becker from Guidehouse led through the Workshop, supported by Karolis Janusevicius of the Lithuanian Energy Agency. Participants reflected on effective arguments to make the case for energy efficiency with regards to different factors for a successful implementation.</p> <p>Arguments and challenges highlighted in the breakout session by the participants with regards to the successful implementation of energy efficiency policies, instruments, and measures included:</p> <ol style="list-style-type: none"> 1. Differentiating the message & address motivation per target group 2. Recognising the issue of energy scarcity and the social dimension 3. Expectation management regarding energy savings and return on investment 4. Strengthening requirements for monitoring and verification 5. Clear vision for implementation 6. Integrated energy planning 7. C-level attention for audit results
<i>Input Collection</i>	<p>After a first round of opening discussion and a brief presentation on the role of narratives for policy implementation, the workshop participants consolidated their input and recommendations on ways and potentials for an effective implementation of energy efficiency policies and measures in Lithuania, complementing the points raised in the first session, including inter alia references to:</p> <ul style="list-style-type: none"> • Differentiating the message & addressing motivation per target groups <ul style="list-style-type: none"> • Swedish example of household competition on energy consumption • Better address low 'energy literacy' and education (from policy level), disseminate good practice • Better recognising the issue of energy scarcity and the social dimension <ul style="list-style-type: none"> • Better enforce "polluter pays" principle, accompanied with fin. support for alternative RES / energy efficient technologies • Local environmental pollution needing to be addressed • Aligning tax structure to decarbonisation targets to favour RES over fossil technologies • Expectation management for savings and ROI <ul style="list-style-type: none"> • Need for robust calculation / benchmarking tools, provided/ backed by trusted institution

- Acknowledging complexity of energy efficiency (EE) improvement in households, need holistic approach
- Linking financial support/ grants to energy performance of supported technologies
- Raising awareness for non-financial benefits of EE in households (health, fire safety)
- Need to increase quality of implementation of EE measures (e.g. through qualification of professionals)
- Creating holistic & synergies / offering of package solutions
- Strengthening requirements for monitoring and verification
 - tightening energy performance standards for new buildings and renovations & requirements for compliance, establish basis for
 - introducing requirements for building automation and controls for renovations with the transposition/ recast of the EPBD as an opportunity
- Clear vision needed for implementation
 - Experience: EPBD requirement for NZEB perceived as obligation rather than opportunity for new buildings
 - Good practices can inspire followers (associations are key drivers, e.g. for pioneering NZEBs)
 - Strongly links to expectation management and integrated energy planning
- Integrated energy planning as a vector for energy efficiency
 - Links to NECP & national initiatives to promote integrated planning. Potential to develop municipal integrated planning, often lack of funding and low priority for municipalities.
 - District heating systems: strong energy efficiency (EE) potential if demand-controlled (e.g. cloud-based, on district / apartment levels).
 - Strong role of local authorities. Pilot projects with municipalities; programmes for EE measures (heating & electricity, incl. metering) in schools/ kindergartens. Yet investment decisions typically require demonstrated financial viability.
 - Need to tackle large investment costs for district heating systems, e.g. by bringing together actors with complementary demands.
- Obtaining C-level attention for audit results
 - Commercial sector: audit obligation for non-SMEs every 5 years (if no energy management in place), hence companies have demand for competent auditors
 - Focussing on replacement of outdated technologies
 - Having the right order of priorities: 1) energy efficiency first (e.g. through insulation), 2) correct sizing of heating systems in buildings, 3) supply sustainable energy
 - Considering audit results more holistically to feed into companies' business strategy

Objective & main programme

The aim of the workshop was to collect input on existing narratives around energy efficiency from business stakeholders with a view to support the effective implementation of energy efficiency policies and measures in Lithuania and in the

point EU. Insights from previous business stakeholder workshops also fed into the discussion.

03/2021: Greece: Business perspectives on energy efficiency policy

<i>Title of the event:</i>	National Business Stakeholder Workshop, Greece: Business perspectives on energy efficiency policy
<i>Date & location:</i>	Online event: - First session: 22 March 2021, 11:00 - 13:00 (Athens time) - Second session: 23 March 2021, 11:00 - 13:00 (Athens time)
<i>Organiser(s):</i>	Guidehouse with support of the Centre for Renewable Energy and Savings (CRES)
<i>Number of Participants:</i>	Session 1: 24 Session 2: 22
<i>Summary of the event</i>	<p>The virtual Business Stakeholder Workshop in Greece set out to discuss the enabling factors for successful energy efficiency measures and policies on national and EU level.</p> <p>A broad range of Greek stakeholders attended the workshop and participated in the virtual discussions. Narratives elaborated in previous Energy Efficiency Watch National Business Stakeholder Workshops were tested and discussed with the participants. The interactive workshop was moderated by Daniel Becker from Guidehouse, supported by Evi Tzanakaki from the Centre for Renewable Energy and Savings (CRES).</p>
<i>Event evaluation</i>	<p>The workshop concept was well understood and picked up with interest by the audience. Narrative elements instrumental for promoting energy efficiency have been elaborated jointly with Greek business stakeholders during the workshop. There have been extended discussions about the energy renovation of residential buildings for instance, specifically the Exoikonomo-autonomo scheme for improving energy efficiency in residential buildings.</p> <p>The collaborative reflection and testing of pointed narratives delivered valuable input for the further elaboration of the Energy Efficiency Watch case study reports.</p>

Objective &
main
programme
point

The aim of the workshop was to collect input on existing narratives around energy efficiency and to receive input from business stakeholders with a view to developing narratives for enabling implementation of energy efficiency policies and measures in Poland and the EU. Insights and pointed narratives from previous business stakeholder workshops also fed into the discussion.

Input Collection

Narrative elements identified, challenges and recommendations for promoting energy efficiency

Key factors and challenges for successful energy efficiency implementation:

- Cost is key for consumers: low-quality Energy Performance Certificates are available at very cheap prices, undermining the uptake of serious offers.
- Markets and authorities need to ensure availability of robust and comprehensive solutions for consumers.
- Educate consumers to become prosumers and on new technologies to better tap into potential for solar energy and develop energy as a service business models.
- Adapt regulatory framework for smart metering, e.g. third-party owners.
- Tailored policies and measures are needed to address different target groups.
- Authorities are often lagging behind market developments regarding updating funding programs and regulation.
- Need to align programmes and support to infrastructure development and technologies with overarching climate and energy targets to avoid lock-ins (e.g. regarding support to gas network development)
- Communication between stakeholders and policy makers needs to be improved, e.g. through structured participation and consultation formats.
- Existing building stock should be more in focus rather than new constructions as there is a large share of vacant buildings in Greece.
- Generally strong own home ownership in Greece and real estate market heavily fragmented. Low levels of trust in co-owners, high cost sensitivity and low energy prices impede household investment. Strong economic volatility and uncertainties for long-term investments. Owners of commercial and tourism buildings have greater incentives to invest in energy efficiency.
- Need to decentralise the energy sector and to manage grid congestions for energy and solar as a service.

There have been extended discussions about the energy renovation of residential buildings, specifically the *Exoikonomo-autonomo* scheme for improving energy efficiency in residential buildings.

Success factors identified:

- The program experienced very wide communication throughout the supply chain, e.g. through public communication, industry advertisement, word of mouth advertisement by households. The scheme is established as a key reference in the market.
- Broad scope, easy access and long duration of the scheme allowed for wide communication and have improved acceptance
- Good match between needs and programme
- “Green DNA” of the scheme
- Found to be good example and very popular scheme throughout the buildings value chain
- increased transparency for the costs and benefits of energy
- The programme also benefited and received support from the construction industry, particularly in the beginning.

Potential for improvement identified:

- Develop better award criteria to enhance credibility
- Expand scope, potentially to commercial buildings
- Shorter intervals of calls for projects – or introduce continuous process
- Improve design of selection process, e.g. through better alignment with the main target of the policy and stronger focus on quality in eligibility and selection criteria; better criteria will improve the acceptance of the scheme
- Improve communication and transparency on the use of funds, e.g. “first come, first served” is not the approach anymore which is still not known broadly; also the technical details are not yet well known by public
- Establishing a feedback platform would be helpful to further expand the application and to improve acceptance
- Exclude support for fossil energy sources as single measures (e.g. for gas meter only in combination with a renewable solution)
- Financial products require further development

In summary, the overarching key themes identified and discussed by participants include:

- Reinforcing the requirements and triggers for energy audits and energy performance certificates
- Enhancing communication between policies/ programmes, stakeholders and consumers
- Differentiating approaches / programmes per target group and considering role of real estate for households and the economic situation
- Adapting regulatory framework to enable new business models

04/2021: Bulgaria: Business perspectives on energy efficiency policy

Title of the event:
Date &

National Business Stakeholder Workshop, Bulgaria:
Business perspectives on energy efficiency policy

7 April 2021, 10:30 - 12:30 EEST & 8 April 2021, 10:30 - 12:30 EEST Bulgaria

<i>Location:</i>	(virtual meeting)
<i>Organiser(s):</i>	Guidehouse
<i>Number of Participants:</i>	19
<i>Summary of the event</i>	<p>The Business Stakeholder Workshop set out to discuss the enabling factors for successful energy efficiency measures and policies in Bulgaria. Gathering Bulgarian business stakeholders from a broad range of sectors including energy services, consumer organisation, and the buildings sector, the interactive workshop was held in an online format divided into two consecutive sessions due to the health-related restrictions of the COVID-19 pandemic. Starting with an introduction to the Energy Efficiency Watch project and aims of the workshop, Daniel Becker from Guidehouse led through the Workshop, supported by Ina Karova from the Energy Agency of Plovdiv (EAP) in Bulgaria. The EAP gave a “local” welcome to the participants and presented the broader EU framework for the Recovery Plan and the Green Deal and how the funds will be allocated to better support innovation activities for the businesses. During the discussions, EAP bridged the activities during the past and the new programming period (as represented in the Bulgarian Recovery Plan) to highlight the expected changes in the policy course and funding opportunities and the participants’ potential to bring in positive changes by sharing their stories and experiences, opinions and suggestions for the future implementation of the Operational Programme. The participants jointly reflected on effective arguments to make the case for energy efficiency with regards to different factors for a successful implementation. Arguments and entry points highlighted in the breakout session by the participants with regards to the successful implementation of energy efficiency policies, instruments, and measures included:</p> <ul style="list-style-type: none"> • Developing research and innovation potential, better involving businesses in funding programmes and incentives structures • Addressing energy poverty in promotion policies and programmes for energy efficiency to achieve a just transition • reducing regulatory barriers for home-installed photovoltaics and energy renovation; enhancing communication towards consumers • Building on the just transition process and market/business support for improved coal phase-out for the local communities
<i>Input Collection</i>	<p>FOCUS question 1 and 2:</p> <p><i>What do you expect from the Green Deal and the Recovery Plan?</i></p> <p><i>What are the successful EE actions, measures, policies in Bulgaria?</i></p> <ul style="list-style-type: none"> • The Bulgarian policies follow a trajectory of low level of ambition. Bulgaria is trying to achieve the goals at the minimum level, probably because we policymakers are not quite sure about achieving more ambitious goals. Thanks to the EU framework for higher goals in the field of energy and renewable energy, Bulgaria will probably follow these more ambitious EU goals and this will be a good lesson to prove that more can be achieved

than initially thought. The hopes are that through time and through monitoring of all goals that Bulgaria has transposed at local level, we will see that in the short-term Bulgaria will be able to achieve the goals and even do better. The expectations of the Green Deal are to do better.

- More active policies for the energy renovation of buildings: There is a huge resource that is envisaged, but there are no innovative measures like energy systems and energy storage systems that could improve the energy efficiency class of buildings.
- There should be better communication of the operational programmes and their funding opportunities. The citizens and businesses are the beneficiaries and if they do not take active part in these actions, results will not meet expectations. A recommendation would be to establish mediators/multipliers who should introduce the ideas to the citizens, because when we speak about increasing the energy efficiency of buildings – this does not mean that the building will just look better. But citizens should be informed about savings in their electricity bills and all the benefits they get. So, these messages should reach the citizens. Households need to understand that their energy actions have an effect and what the exact effect is.
- Buildings are an important part of the energy problems. In practice, the Bulgarian legislation would require some reforms, especially regarding privately owned buildings. The Energy Operator needs to grant permissions for energy generation which is a long and burdensome procedure – this needs to be changed so that more individual installations are established and more citizens become prosumers.

The second session of the workshop started with a brief presentation on the role of narratives for policy implementation after which participants consolidated their input and recommendations on ways and potentials for an effective implementation of energy efficiency policies and measures in Bulgaria, complementing the points raised in the first session, including inter alia:

Research and innovation

- Implementation of good practices is difficult due to a lack of understanding for the need of pilot projects with involvement of businesses in Bulgaria and Eastern Europe; best practices are more convincing than political commitments.
- Businesses are willing to be part of innovation processes for products and services
- Need to develop R&D infrastructure with a more prominent role for businesses in R&D landscape to tap into innovation potential, e.g. innovation clusters, technology/industrial parks (to be considered in EU funding)
- Transformations, including the energy transition as a transformative process, should be based on innovation.

- Bad example: the national procedure for innovative clusters – there was a call open twice and cancelled twice due to different reasons. This sent a bad signal towards the businesses that spent significant time preparing their applications.
- Due to lack of innovations in the companies/businesses, the economy is facing issues with limited competitiveness.
- Bulgaria lacks innovation structures (excellence centers, tech parks, etc.) and the Recovery Plan is a great way to address this.
- There should be a synergy between the businesses and the local communities in developing innovations, because the businesses may find their interests implemented only through the acceptance of the local communities.
- Nurturing the local business ecosystems and supporting them to grow into tech parks or similar ecosystems will improve their market competitiveness.
- Good practices for innovations are related to the existence of pilot projects. And in Bulgaria and Eastern EU Member States, there is a lack of understanding on political and administrative level for the need for pilot projects with the participation of businesses. Usually, this understanding is related to the universities and their lab prototypes. A recommendation would be to send out a message that more pilot projects are funded, through which adequate good practises are established and promoted.
- **There is a strong need for infrastructure for research or for development of innovations and their market uptake.** In Bulgaria, there is just one example – the HighTech park in Sofia. There was an idea that the Park is replicated in Plovdiv – where there are many universities, companies, clusters - but it did not receive support from the national level (although on local level there is some support).
- There may be some possibilities in universities and research institutes, but their capabilities are very limited and represent isolated research pieces that are not in cooperation with the businesses.
- The Teaming opportunity is currently not included in the Bulgarian Recovery Plan, so we would like to send the EC a message that we wish to have more opportunities for the Teaming programme and that there should be representatives of other research and development bodies, different from the traditional university bodies and academic bodies in the Bulgarian Academy of Sciences. **The feeling is that there is some understanding for supporting the academic bodies only.** The major criteria for selection should be relevant experience and not necessarily being a traditional academic body or a university.
- The universities are mostly oriented towards education, not R&D. If we rightly identify business as drivers of the innovation, then the market uptake will happen more quickly. **An example are the excellence centers created throughout the country – currently, they are not operational,**

whereas the “Innovative Clusters” procedure was a success. Another failed procedure is the one for regional innovation centers – it was launched twice and then cancelled. It turned out that it cannot be launched only for the universities and it was transferred to the OP “Competitiveness and Innovation”. There was a cheer from the regions, because usually most things happen for the Capital and not for the regions. The major requirement was for a new legal body – and many of the potential beneficiaries went through a lot of administrative and legal procedures to formalise their partnerships. At the end of the day, the procedure was cancelled and all these efforts turned out to have been in vain. It was a bad message for the businesses.

- There is a good example with the regional industrial parks in Spain that can be followed in Bulgaria and other Eastern EU countries.

Energy poverty (EP)

- Stakeholders asked for legislative and regulatory changes to accommodate the Energy Poverty definition
- The EP definition needs to be set on four criteria: income, energy price, building status, energy consumption behaviour.
- The definition may need in-depth study of the underlying EP factors and may turn out to be very fluid.
- First step to alleviate EP should be to develop a definition. The second step would be to develop new energy efficiency policies which in Bulgarian can be summarised in three categories: 1/ energy efficiency, establishing actions and measures for funding opportunities; 2/ mechanisms for informing the EP households about the process of liberalisation of the electricity market; 3/ measures for encouraging rational energy behaviour aimed at saving energy.
- The EP definition will allow for the development and establishment of mechanisms and policies for effective public spending and triggering energy responsible behaviours with a focus on the energy poor families.
- Example/proposal: if there is an EP definition, then it will allow for segmentation of the EP households so that they may get their renovation funded by the state at 100% whereas non-EP households may have to co-fund it at 50%
- Low-income households mostly live in single/multiple family houses are not aware of energy efficiency aspects (heating system with potential for improvement); need to reach out actively to them.
- Program run by Social Affairs Ministry (winter energy package, voucher for energy bills) didn’t include behaviour changes.
- Good example: in the Plovdiv region, EAP and local businesses conduct EP campaign by providing energy saving equipment for EP households. The campaign can cover only about 100 households per season, but has a leverage factor of 3-4 times the initial investment, whereas the national

policy does not have energy, environmental or financial effect. It only funds the energy bills of the applicants and thus does not motivate them to change their energy behaviour.

Energy renovation and smart cities

- In Bulgaria, the state grant for energy renovation of multi-family buildings provides funding at a 100%-rate which makes the citizens passive actors, typically not seeking other opportunities for deep renovation and for more funding of ambitious measures. It would be a mistake that in the new programming period, again a 100% is granted to all households without differentiation.
- Need for development of One Stop Shops for energy renovation services in the municipalities in which all local actors are represented (incl. businesses).
- The current Energy Renovation programme does not have EP mechanism. It aims at C-class of energy efficiency of the building and thus does not call for ambitious measures.
- There should be investment in the new buildings as well so that they can become near zero or energy positive. Currently, even in the new buildings in Bulgaria, there are not innovative energy solutions that may help it be energy independent.
- Cities need to be a stage for more ambitious projects. This is lacking in Bulgaria.
- There is a need for energy positive zones and buildings, smart cities, smart installations and buildings.
- The understanding of energy efficiency gets limited to the infrastructural projects only – putting insulation and changing windows. There are no smart solutions as energy management or smart heating services. This creates an attitude of neglect in the citizens and they say “Is this your energy efficiency? Insulation and windows?”
- The EU framework may support us to impose some mandatory measures such as energy management, renewable energy for heating, photovoltaics, geothermal energy, etc. Through these a better and more innovative refurbishment of the buildings may happen. The municipalities are a medium for innovation development through public finance and this public finance may be put to very good use.

Just transition

- Structural change and other specific circumstances of Eastern European areas have to be considered, transfer of experiences is needed.

- Coal is central to the Bulgarian society, the New Green Deal could be a chance, but a certain campaign is needed to convince citizens of this change
- Just transition funds cover three municipalities, where there are highly qualified people who are an asset for R&D and energy sector (away from coal); qualifications can be redirected to be also used in R&D sector
- Energy transition should be also based on innovation, not only investment, but innovation is typically riskier and harder to implement
- The local citizens are sensitive to the coal topic, because this has been their occupation for generations. Policymakers are trying to “play it safe” and avoid saying that these coal capacities need to be shut down and that preparations need to start now. Policymakers shy away from participating in debates on just transition; they do not want to start initiatives in this field because they believe it will give a negative sign for the future of these people. The debate is currently impossible to start and develop in a constructive way. The hopes are that the Green Deal may ease the strength on this process.
- The coal zones need to be revitalised and put to good use in the future – for example, with renewable energy capacities. There are possibilities for utilising waste from the coal pits, etc.
- There is a need for a larger campaign telling people what their future can be.
- Coal workers should not be afraid of the change, because they have strong educational background and long life experience in the energy sector and they should not be afraid that they will unemployed as long as the state establishes other energy businesses and business environment to employ them. What the state plans to do remains to be seen, though.
- Energy businesses need to be involved in the just transition for these regions in Bulgaria, because people would rather trust actors with good practices and market experience behind their back rather than the political faces with promises.
- No matter what messages we send without the good example from the higher level, not only political, but also experts and social, the just transition may happen to be a painful process. So, examples must be given, practised and promoted. And to be generated.

*Objective &
main
programme
point*

The aim of the workshop was to collect input on existing narratives around energy efficiency from business stakeholders with a view to support the effective implementation of energy efficiency policies and measures in Bulgaria and in the EU. Insights from previous business stakeholder workshops also fed into the discussion.

*Event
evaluation*

The workshop concept was well understood and picked up with great interest by the audience. The opportunity to transmit feedback from the business community to decision makers through the project was particularly appreciated.

Considering the online format of the event, an in-person workshop might have been still more effective compared to virtual formats.

06/2021: France: Business perspectives on energy efficiency policy

<i>Title of the event:</i>	National Business Stakeholder Workshop, France: Business perspectives on energy efficiency policy
<i>Date & location:</i>	Online event: 08 June 2021, 14:00 – 16:00 CEST
<i>Organiser(s):</i>	Guidehouse, with support by the Regional Energy & Climate Agency of Île-de-France (Agence Régionale Énergie-Climat - AREC)
<i>Number of Participants:</i>	10
<i>Summary of the event</i>	The Business Stakeholder Workshop in France set out to explore enabling factors for successful energy efficiency measures and policies, on both the national and on the EU level. French business stakeholders attended the workshop and participated actively in the virtual session. Narrative elements identified in previous Energy Efficiency Watch National Business Stakeholder Workshops were fed into the discussion and jointly reviewed with the participants. The joint reflection on enabling narratives for energy efficiency provided valuable input from the perspective of the French business community for the elaboration of the Energy Efficiency Watch case studies. Daniel Becker of Guidehouse led the interactive workshop, supported by Marie-Laure Falque-Masset from AREC, the Energy and Climate Agency of the Île-de-France Region.
<i>Event evaluation</i>	The workshop concept was well understood and received with interest by the participants. The joint reflection and testing of pointed narratives provided valuable input for the further elaboration of the Energy Efficiency Watch case study reports and will be deepened in the following business stakeholder workshops. Generating significant turnout from the business community proved to be a challenge in the context of the sustained COVID-19 environment and a related online fatigue regarding virtual meetings.
<i>Objective & main programme point</i>	The aim of the workshop was to collect input on existing storylines on energy efficiency and to receive input from business stakeholders with a view to developing enabling narratives for the effective implementation of energy efficiency policies and measures in France and the EU. Insights and pointed narratives from previous business stakeholder workshops were tested and fed into the discussion.
<i>Input Collection</i>	Narrative elements and recommendations elaborated jointly by the French business stakeholders during the workshop comprise:

- **Trust** must be regained since the old narrative of the savings paying for the costs did not (always) deliver, participants found. Consequently, support of the economic actors of energy efficiency and for related policies was lost. The mainstream discussion focuses on deep renovation and technical issues, but the **financial perspective** is not a focus and therefore needs to be followed up upon in the discussion.
- A **just transition must be guaranteed**: the question of who will be paying (e.g. for renovations of residential buildings, necessary infrastructure like hydrogen pipelines etc.) needs to be solved and communicated. Funding in the framework of the Green Deal and Covid-19 recovery will play a key role.
- The **job impact** of energy efficiency needs to be better communicated. Creating educational and transformational jobs, educating pupils on the energy transition and energy efficiency issues, convincing young people to choose related professions, and developing new jobs (e.g. mechatronics, craftsmen) is key. Energy efficiency and energy savings measures should be a focus of **education and training**.
- **Energy poverty** is regarded as one of the central issues in France. The cost issue needs to be addressed, especially with regards to the needs of low-income households. This includes matters of social housing, affordable energy renovations and financial tools for thermal renovation of houses and condominiums. Affordability and environmental considerations of mobility is another topic area with big discrepancies between rural and urban populations.
- There is a need to aggregate multifamily houses for upscaling energy renovations and to develop approaches on how to organise these on the level of regions.
- **Stimulating behavioural change** is seen as a further component of addressing energy poverty. Positive compensation of the individuals should be a focus, as well as developing attractive attributes and a corresponding image of energy efficiency solutions, e.g. with regards to smartness.
- Maintenance requirements (operated by service providers) and associated costs for **smart homes** (as part of a renovation) need to be communicated and made transparent to increase acceptance for new technologies and the energy transition
- For a holistic approach, the link between **circular economy** and energy efficiency should be kept in mind, especially concerning insulation materials.

Task 3.5: Input gathering from network partners

Discussion & Poll questions – takeaways Delivering on the Renovation Wave:

Covenant of Mayors & EEW4 webinar on Narratives & financing
27th April 2021

Poll questions & results

Comments live or chat

Polls

Sharing Poll Results

Attendees are now viewing the poll results

1. Which priorities are now the most decisive within the municipality when focusing on climate / energy transition issues?

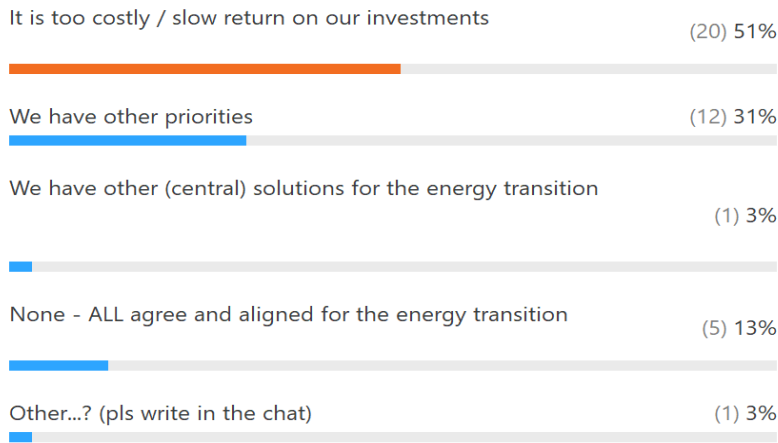
Job creation	(6) 15%
Maintenance / survival	(3) 8%
Fundraising / cost savings	(15) 38%
Improving air quality	(8) 20%
Increasing the attractiveness of the city	(6) 15%
Other... (pls write in the chat)	(2) 5%

Download Stop Share Results Re-launch Polling

Sharing Poll Results

Attendees are now viewing the poll results

1. If you think of your municipality, what are the major arguments against (Killer arguments) investing in energy efficiency / the energy transition?



Download

Stop Share Results

Re-launch Polling

*Brilliant idea; but maybe later.
Lack of competences in the p
Regulations slow down or blo
Local decision making proces*

*From Roma Capitale SECAP
Panelists: 02:59 PM
Lack of competences in the p*

*From Almut Bonhage (Stefan
Panelists: 03:00 PM
ALL agree and aligned for the
concrete action.*

*From Roma Capitale SECAP
Panelists: 03:00 PM
plus: political decisions too slo*

*From Thibaut Maraquin, CoM
PM
Do not hesitate to take the flo*

*From Rosario Vargas to Every
Small municipalities like mine
money to use it for energy effi
just a momento please*

*From Laura Papaleo (CMGe)
We as Coordinator (Metropoli
problems in keeping updated
municipalities, to support them
there are not easy fundings fo*

Sharing Poll Results

Attendees are now viewing the poll results

1. In your opinion, what are the key motivations (beyond cost savings) for a municipality to engage in energy-efficiency / the energy transition? (max. 3 choices) (Multiple choice)



Download

Stop Share Results

Re-launch Polling

*From Laura Papaleo (CMGe)
We as Coordinator (Metropoli
problems in keeping updated
municipalities, to support them
there are not easy fundings fo*

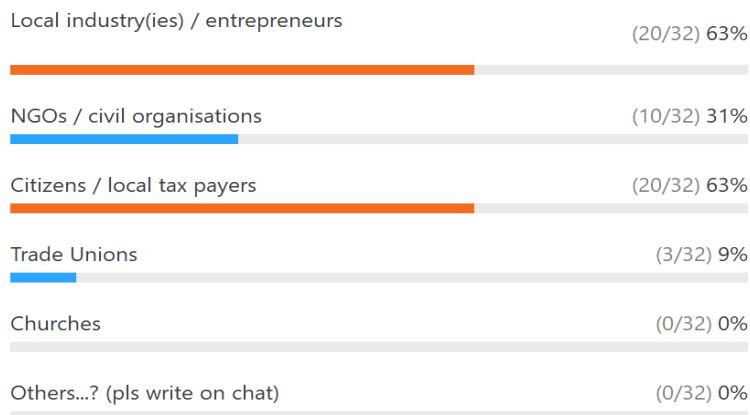
*From Evita Riekstina to All Pa
I am very sorry not bee
ing able to reply*

*From Cristina Coelho to Every
Setúbal municipality here: in F
energy poverty issue the conc
europe is not the same as in t*

Sharing Poll Results

Attendees are now viewing the poll results

1. Which interest groups (stakeholders) are the most influential on your local energy policy / investments ? (max. 2 choices) (Multiple choice)

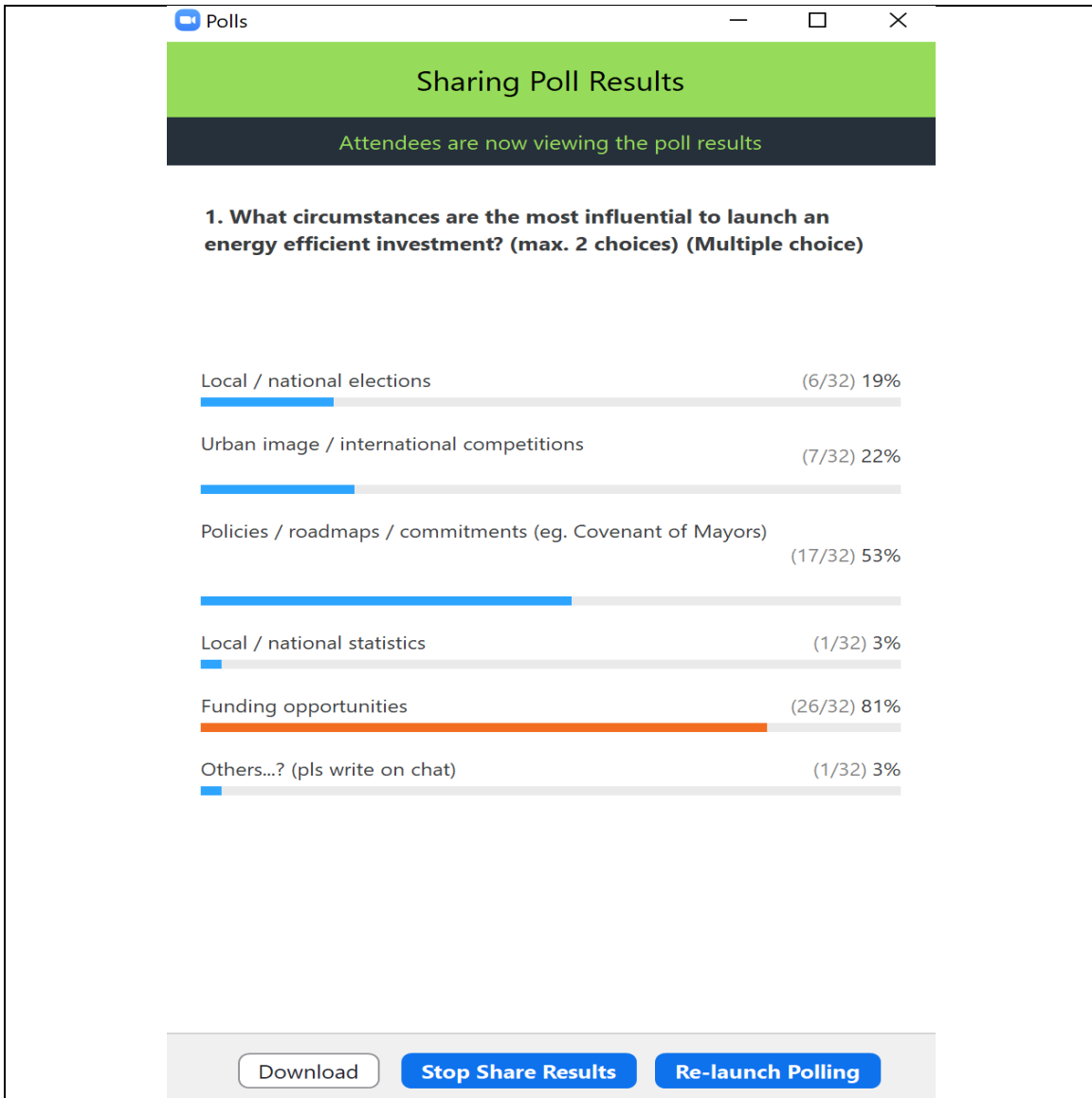
[Download](#)[Stop Share Results](#)[Re-launch Polling](#)

*From Daniel Becker to All Par
what about innovative builders*

*From Andreas Jaeger [ICLEI]
Complementing Daniel Becke
procurement policies to carry
public buildings can really help
fragmentation*

*From Rosario Vargas to Every
I think there is a big difference
countries in Europe in terms of
behave. Public image it is not
not encourage by policies*

*From Roma Capitale SECAP
Everyone: 03:35 PM
"I think there is a big difference
countries in Europe in terms of
behave. Public image it is not
not encourage by policies" I c*



*From Svyatoslav Pavlyuk EEC
The decision for investment is
availability of low-interest finan
likely to occur.*

Task 3.6: Input gathering from focus group

Deliverable D 3.7 Input from Focus Group

GA: This summary report on the input of the focus group will sum up the findings of the focus group and serve as input to the next project phase. They will be published on the project website soon after the event. The Focus Group, consisting of selected single members of all stakeholder groups involved in the process, will be consulted to sharpen the essence of the findings of tasks 3.2 -3.5 [i.e. NPWS, Survey, Business Stakeholder WS, input from network partners] and add, where applicable, their own pointed views.

The on-demand focus group meetings (3-4 meetings) will be virtual, i.e. taking place via group phone calls / video conferences (each max 1.5 hours). Before a meeting, the Focus Group will receive a written overview (ppt slides) of the results of tasks 3.2 – 3.5, accompanied by requests for specific input on certain questions which require a ‘second opinion’ or further interpretation. Depending on the case, this will happen as discussion with the whole group or in interview style

with one or more members, the outcome of which then to be shared and discussed with the full group. In some cases, members of the Focus Group may also be asked for written commenting. All results will be documented in a written summary, including also meeting documentation.

Number Participants: 6-10

The original concept of the focus group, as outlined in the project proposal, had to be altered due to the impact of the pandemic. Originally it had been planned to compose the focus group as a small group of experts with special commitment to the topic, to be identified during the in person meetings with business stakeholders, Members of Parliaments et al. A first 'large' focus group meeting took place in Berlin in January 2020, generating valuable initial inputs for first directions in which to search for narrative examples. It had been planned to further use this meeting format, gradually narrowing the composition of the group to the size and scope which had been aimed at, for further discussion and refinement of the findings from the input phase. As it turned out when the input phase had just started (1st business stakeholder workshop took place in person by end January 2020, others planned to follow as of March 2020), no more in person meetings were possible due to the pandemic. The approach of stakeholder workshops had therefore to be shifted rapidly to online formats. At first, this was meant to be on preliminary basis, as not all countries felt comfortable with online workshops. The intention was to offer them, when possible again, a later engagement at in person meetings, but finally all envisaged input had to be gathered in online events. Accordingly, the focus group approach had to be shifted to a remote format, which then took place via phone calls with individual experts and consultations embedded in other online events.

In essence, those consultations helped to select interesting cases from the large amount of inputs given during the stakeholder workshops, to shape them as clear-cut cases and identify the main narrative structure, also in relation to the other cases.

The selected cases at this stage were:

1. Wanting to be a front runner
2. EE as integral optimization of production cycle
3. Only talk about a real business case
4. Transparent foundations for EE achievements
5. Understand your clients: working with the image of technologies
6. Just transition – (where) is compensation really needed?
7. Communication is key – the role of stakeholder dialogues
8. Research and innovation
9. The right pace for workforce qualification
10. Who is price sensitive and how to discuss cost distribution

Story line definition happened via slide decks following a standard pattern (examples):

Wanting to be a front runner

Starting point / past narrative:	<ul style="list-style-type: none">• Some countries (e.g. DK) have achieved broad societal consensus: 'It is good for us to be a front runner' – this facilitates innovative thinking / active and smooth transformation
Changing narrative:	<ul style="list-style-type: none">• In many European societies, transformation is connotated primarily as an uncertainty or even a threat• But even in 'change sceptic' contexts there is regional or sectoral experience / ambition to become pioneer in certain areas• Often strongly linked with image / overcoming old & unwanted perceptions
Practical and policy implications:	<ul style="list-style-type: none">• Identify such potential and develop convincing front runner narratives• connotate transformation as beneficial by showing pioneer advantages



EE - integral optimization of production cycle

Starting point / past narrative:	<ul style="list-style-type: none">• Energy efficiency = linear relation between energy input and economic output (in macro-economic terms as well as on business level).• Narrow view on the economics of EE → reduces EE measures to issues like “payback period” → results in low priority for EE measures in many businesses (where energy prices are not sufficiently relevant)
Changing narrative:	<ul style="list-style-type: none">• EE is in some contexts thought of and communicated in a more integrated manner → optimization not only of the energetic performance but of the overall production process via EE measures → positive implications on quality of output, cost of production and overall competitiveness of business (not just with a view to energy costs).
Practical and policy implications:	<ul style="list-style-type: none">• Energy audits require a comprehensive understanding of the respective production cycle (thus requirements for highquality EAs may be more clearly defined)• Companies need to discuss EE not as a single matter but as a means to modernize the production process and improve the product / offering → at higher management level



Only talk about a real business case

Starting point / past narrative:	<ul style="list-style-type: none">• Companies adjust their sales strategies strictly to commercially competitive criteria• They stress the importance to sharply distinguish between those and indirect factors such as environmental protection.
Changing narrative:	<ul style="list-style-type: none">• The frequently applied approach (a.o. by agencies promoting EE) of highlighting co-benefits increasing the attractiveness of energyefficiency is considered as rather counter-productive• companies argue that - although acknowledging an additional marketing effect - co-benefits could never balance outstructural competitive disadvantages (e.g. high payback times of EE products in a context of low energy prices) and stressthe risk of neglecting/concealing this businessimperative.
Practical and policy implications:	<ul style="list-style-type: none">• Focus should be laid on creating levelplaying fields where more EE products and services can in economic terms compete with conventional/less efficient products.



Transparent Foundations of EE achievements

Starting point / past narrative:	<ul style="list-style-type: none">• In various country contexts, companies complain that EE achievements (effective savings, market transformation etc.) are not visible enough / not based on the right data or even countered by fake news• Thus, public opinion questions EE, despite a clear proof of its benefits could be given
Changing narrative:	<ul style="list-style-type: none">• Public debate needs to be steered along objective information on economic benefits and realistic cost estimations of EE
Practical and policy implications:	<ul style="list-style-type: none">• EE policies should be accompanied by sufficient documentation (statistics, evaluation, dissemination) of benefits and achievements Those should serve for <ul style="list-style-type: none">• communicating successes and need for additional action• improving existing policies / sharpening their applicability to the target groups



Understand your clients: working successfully with the image of technologies

Starting point / past narrative:	<ul style="list-style-type: none">• Although many policies and support schemes replacing outdated inefficient technologies are in place target achievement is often lagging behind.• Levelling the cost difference to efficient technologies doesn't always get to the heart of the decision-making to replace a technology.
Changing narrative:	<ul style="list-style-type: none">• Including a socio-economic analysis of target groups shows a more differentiated choice of appropriate instruments, esp. the image/specific interest associated with a certain technology can have substantial positive or negative impact on target achievement.• Campaign focusing mainly on the negative impact of outdated technologies or the positive impact of new technologies, e.g. oil heating systems (interest in high technological standards, value development of real estate, quality of life incl. image component), Eastern European context: negative image associated with wood heating as a sign of poverty and backwardness
Practical and policy implications:	<ul style="list-style-type: none">- Mix of appropriate instruments is needed, cost arguments are not always the decisive ones- Supportive image campaigns -> considering socio-economic aspects



Just transition – (where) is compensation really needed?

Starting point / past narrative:	<ul style="list-style-type: none">• In the political debate, it is broadly suggested that energy transition will require massive financial compensation for various groups• Examples show that often net effects are more positive than assumed / outweighing cost where transformation is properly implemented
Changing narrative:	<ul style="list-style-type: none">• The term 'just' suggests that transformation as such might be unjust (link to case study 1)• This may imply a strong societal expectation for compensation without comprehensive consideration of economic chances• If this attitude remains, policies will fail / speed of transformation will be too slow• Replace compensation-oriented debate by targeted strategies for highlighting and quantifying positive effects and according communication
Practical and policy implications:	<ul style="list-style-type: none">• Break up negative connotation of transformation by highlighting positive net effects• Ensure that compensation is available –but only to those in actual need• Make these approaches part of larger transformational strategies, providing job perspectives and economic growth chances for vulnerable stakeholder groups, struggling regions etc.



Communication and dialogue

Starting point / past narrative:	<ul style="list-style-type: none">• Success of EE policy implementation depends on stakeholder involvement (e.g. entrepreneurs / end users / groups potentially affected by transformation), facilitated by proper communication• dialogue formats on all levels are not yet at required levels –large regional differences• Lack of information leading to low commitment and little ability to work with policies / establish successful business within them
Changing narrative:	<p>Further establish</p> <ul style="list-style-type: none">• Communication of policies• Dialogue with civil society• Stakeholder involvement• Parliamentary hearings• Feedback mechanisms for target groups, etc.
Practical and policy implications:	<p>Policies need to comprise dialogue formats such as</p> <ul style="list-style-type: none">• early stage: what is planned, hearing who takes which position, feedback collection• Implementation phase: information & guidance on how to work with the regulation / support scheme• forward looking: regular evaluation & adjustment, incorporating stakeholder feedback



Task 3.7: Synthesis of inputs and analysis of results

Deliverable D 3.8 Report on analysis of results

1. Project background and report outline

Energy Efficiency Watch 4 (EEW4) is a Horizon 2020 project aimed at supporting policymakers in the EU in enhancing effective implementation of policy instruments for energy efficiency,

thereby contributing to reach the target of the Energy Efficiency Directive. Based on multiple inputs from policymakers, business stakeholders and energy experts collected through dedicated workshops and a broadly disseminated online survey, EEW4 is identifying and developing argumentative drivers in public discourses that facilitate the adoption and effective implementation of energy efficiency policies in the EU.

This synthesis report summarises the material the project team received from decision-makers, stakeholders and experts through its various input channels. These comprised dedicated workshops and meetings with both EU-level and national audiences in multiple Member States, an extensive EU-wide expert survey, a focus group as well as input from the EEW4 network partners Energy Cities, the European Federation of Agencies and Regions for Energy and Environment (FEDARENE) and Borg & Co as administrators of the European Council for an Energy Efficient Economy (ECEEE). The full overview of events and channels through which the project team received target groups' input is provided in the annex under section 7.

In this report, we first summarise the project's consolidated analytical approach, before reviewing the input collected from the project's target groups and clustering it by overarching key themes. In the next step, we crosscheck the collected themes and main strands of arguments for congruence and divergence between different stakeholder groups. Finally, we filter the material and identify the themes with the greatest relevance and potential for fostering enabling narratives for energy efficiency measures, building on the methodology described in deliverable D 3.1. The aggregate results are presented in the summary table in section 5.

2. Approach

A core objective of the EEW4 project is to identify and develop narratives that facilitate the effective adoption and implementation of sustainable energy policies and energy efficiency measures in particular. During the inception phase, the project team fine-tuned and consolidated the project's analytical approach for collecting and processing stakeholder input through a dedicated focus group workshop. Specifically, the workshop focussed on the topic of 'Capturing narratives in energy efficiency – from concept and experience to analytical practice'.¹ The event gathered a selected group of experts comprising communications specialists, political advisers, city representatives, energy agencies and corporate networks as well as the EEW4 team. Having a diverse group of experts with different backgrounds also helped to maximise the practical relevance of the project findings. Key insights from the meeting comprised:



- understanding narratives as contextual to different geographies, historical experiences and actor groups in society;
- connecting macro-level storylines and discourses with bottom-up dynamics of local and regional experiences and good practices;
- the need to speak to the 'minds' and 'hearts' by leveraging both factual evidence and emotive appeal to stimulate behavioural change;

- tailoring narratives to target groups and speaking to their core issues and storylines;

Figure 1: Input collection for narrative

- approach in EEW4 involving stakeholders and multipliers as ambassadors and 'sales agents' for dissemination.

The insights provided by the experts on how to approach the narrative concept and to maximise its practical relevance were taken forward by the EEW4 team. They fed into the documentation of methodology and informed the implementation of stakeholder events and the analysis of the input received in particular.

In conceptual terms, we understand narratives broadly as set of consistent chain of statements or stories that typically have a beginning, a middle part and end. Importantly, these stories can be considered as political mechanisms themselves to build consensus among a group of actors, given that 'without stories no consensus' (Hajer 2002). As the constitutive elements of narratives, these stories are often told neither in chronological order nor in full length, but rather expressed in short storylines, presupposing specific background knowledge of the narrative in question (Hajer 2005). For the purposes of the EEW4 project, enabling narratives for energy efficiency can thus be conceptualised as a set of storylines about accepted benefits of energy efficiency in a country or a region. In addition to energy or climate related benefits, these can be economic benefits (e.g. saving money for energy users), social benefits (e.g. fewer unhealthy buildings) or political benefits (e.g. decreasing import dependency).

3. Clustering of key themes

This section provides an overview on the main points and lines of arguments raised by the full range of EEW4 target groups, i.e. parliamentarians and decision-makers, business stakeholders and the community of energy efficiency experts. These can be clustered into six overarching themes and aspects of energy efficiency:

1. Business case and financial rationales
2. Macroeconomic and industry policy rationales
3. Technology image and popular perceptions
4. Education, research and innovation
5. Transparent communication and inclusive policymaking
6. Social impact of the transformation

2.1 Business case and financial rationales

A major theme that permeates key strands of the input received in EEW4 is the argument to put the economic and financial viability of energy efficiency measures at the centre. This view was found relevant from both a business perspective as well as from a consumer standpoint. Relevant storylines target groups voiced in their input comprise:

- Against a common perception of energy efficiency measures as being a complex and expensive undertaking, enabling communication should emphasise the monetary (rather than energy) savings, particularly when speaking to the business community. Related communication should focus on the returns and enhanced profitability gained through efficiency measures as a strategic advantage, and generally promote the idea that '*there is money in this*'.
- For the corporate sphere, the wider non-energy benefits of efficiency measures should be translated as much as possible into monetary terms or tangible business benefits, e.g. regarding their potential for optimising production or other corporate processes. Companies' requirement to carry out energy audits creates windows of opportunities that can be used as a starting point for such more comprehensive assessments.

- Promoters of efficiency measures should be realistic when communicating on their expected performance vis-à-vis clients and households. Past experiences of overstated saving expectations have undermined consumers' much needed trust in suppliers and in efficiency measures in general. Non-monetizable benefits such as enhanced convenience should be presented as separate from the economic business case. In the communication towards consumers, these may well be put at the centre given that enhanced convenience is often more tangible or a bigger priority to them compared to expected savings.

Overall, the general emphasis on the financial viability of energy efficiency measures and related business cases in the input received with EEW4 reflects the well-established corresponding public discourse on the matter.

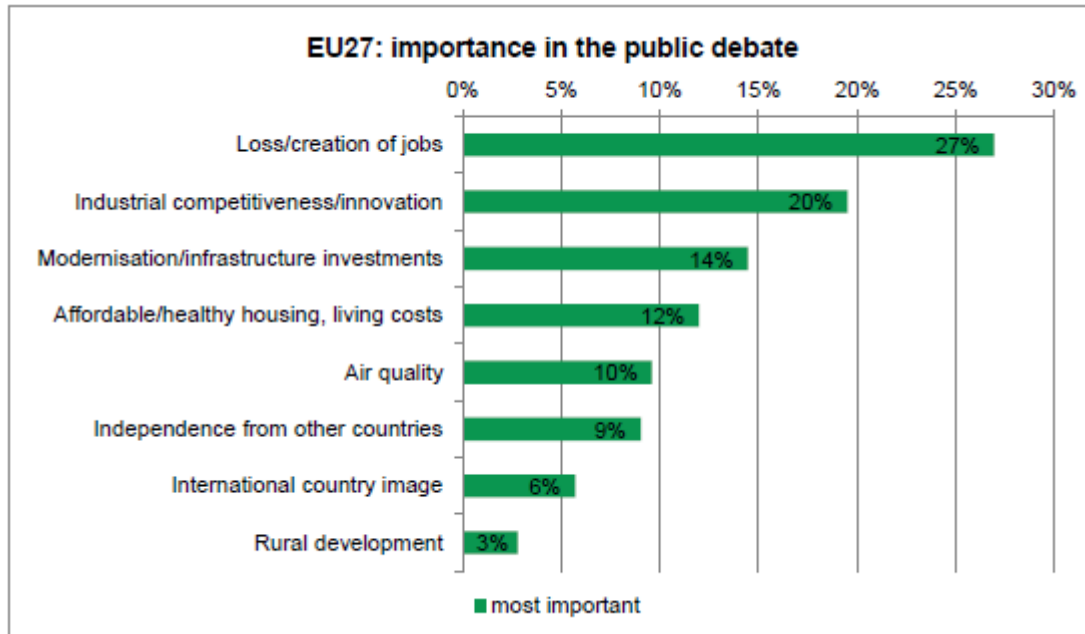
2.2 Macroeconomic and industry policy rationales

Macroeconomic benefits of energy efficiency and their relevance for forward-looking industry policies were another consistent thread in the input collected. Views with corresponding rationales were expressed on numerous occasions across all actor groups consulted. Relevant storylines target groups voiced in their input comprise:

- The general view that more attention to the positive effects of energy efficiency on employment, industry and competitiveness is needed, as the EEW4 survey with responses from over 1,200 energy efficiency experts from all Member States concluded. Accordingly, better EU-level visibility, common indicators and quantified data could help to move the debate forward.
- Collective experiences – past and present – of and pride in experiencing macroeconomic benefits resulting from fostering the development of renewable and energy efficiency technologies, conveyed in statements such as: *'In Denmark, we managed to create new jobs. We will create new jobs by developing windmills and solar panels and we can show in practice that we are creating jobs for regular people at the same time as we are saving the world'*.
- The aspiration to demonstrate policy leadership for the carbon neutral transformation as a recognised means to stimulate industrial development, employment and competitiveness and a way to enter a virtuous circle of ambitious policies creating space for climate-friendly industries that in turn ask the policy framework to be reinforced, as expressed through contributions such as: *'Ambitious governments need to support the industry with the right regulatory framework. A lot of changes are coming from the industry itself who then ask the politicians to set the proper legislative framework'*.

In general, narratives that positively link energy efficiency to topics of employment, industrial competitiveness, innovation and modernisation can be expected to have a strong potential to resonate in societies given that these are the themes experts identified as most important in public debates in the EEW4 survey (cf. Figure 2).

Figure 2: Importance of key topics in the public debate (EU-27), source: EEW4 survey



2.3 Technology image and popular perceptions

Beyond financial and economic aspects of energy efficiency measures, target groups also highlighted the relevance of common perceptions of efficiency technologies and shared experience on how communication campaigns utilise or help to alter these. Relevant storylines target groups voiced in their input include:

- The need to address perceptions and popular images associated with energy technologies, notably in the communication to household consumers. Experience shows that targeted communication campaigns addressing the 'image factor', or the 'appeal to the ego rather than the wallet', can be particularly relevant in contexts where financial support or incentives fall short of producing change at the intended magnitude. By providing the corresponding framing, tailored communication efforts can effectively appeal to the inconvenience of the status quo, or to the benefits of taking action to adopt efficient solutions (cf. Figure 3 below for an example).



Figure 3: 'Bye to oil' campaign to phase out oil heating in Upper Austria, source: www.adieuöl.at

- Communication campaigns can maximise impact by mobilising 'ambassadors', i.e. organisations or individuals who lead by example and act as multipliers among target groups. Addressing intermediaries in direct contact with consumers such as suppliers, building professionals, installers, retailers is crucial to advise and motivate households and businesses to engage in efficiency and adopt sustainable solutions and behaviours, e.g. along the lines of: *When offering energy services, clients should be challenged: everybody knows that energy consumption must be decreased in future, so ask what they are doing.*
- To leverage their full potential, communication strategies should be based on thorough target group analysis and understanding, e.g. regarding their income structures, motivation to act as well as attitudes and views based on the socio-economic and cultural analysis. Different channels of (social) marketing can be used.

2.4 Education, research and innovation

As key enabling factors, business stakeholders in particular pointed to the key role of education, research and innovation as enablers needed for implementing the transformation to carbon neutrality in general and for advancing energy efficiency in particular. Relevant storylines target groups voiced in their input comprise:

- Understanding research and development as fundamental vectors to develop and to help mainstream the innovations, technologies and processes needed to deliver the transformation to carbon neutrality.
- The challenge of missing involvement of businesses and organisations outside a restricted circle of institutionalised academia by the research sector and relevant public funding lines, as well as a constrained capacity of the research and development sector to bring innovations to the market and stimulate broad market uptake.

- Issues with lacking technical knowledge and skills to deliver climate-friendly innovations as well as available solutions in key industries due to missing opportunities for training and development. A vicious circle observed in certain sectors of the supply side lacking know-how for providing state-of-the-art climate-friendly solutions and the demand side having little trust in the quality of available innovative market offerings, thus a situation leading to lock-in effects.
- On a more general level, a mismatch perceived between the focus of the education system and the qualifications needed to implement the energy transition, for instance regarding certain technical qualifications.
- The need to foster effective and inclusive collaboration between education, academia, research organisations and businesses to enable the sector to deliver its full potential for powering the uptake of energy efficiency solutions and the carbon neutral transformation as a whole.

2.5 Transparent communication and inclusive policymaking

To advance energy efficiency, target groups also identified challenges and opportunities in data availability, transparency and communication underpinning efficiency measures as well as in the policymaking process as such regarding the involvement of civil society. Relevant storylines voiced in their input include:

Transparent communication and trusted reference data:

- The positive impact of energy efficiency is a priori less evident e.g. compared to benefits of renewable energy generation, as actual savings in combination with additional economic benefits are typically more difficult to quantify and compare with a 'no measures' baseline scenario. Consequently, benefits of energy efficiency policies and measures are observed to lack salience and recognition in public debates, also due to missing references to data acknowledged as objective and independent.
- This is found to create risks of unfounded interpretations or even fake news and undermines the visibility of energy efficiency policies' success which in turn may be put into question more easily. It also contributes to the short-term payback considerations being the focus of attention, while important longer-term effects of efficiency action such as better protection against future energy price developments are less considered.
- Improved data compilation and generating additional data e.g. through direct metering, digital applications etc. create opportunities to make the impacts of efficiency measures more tangible and transparent to consumers and the general public through targeted communication.

Inclusive policymaking:

- Platforms for communication and exchange between policymakers and stakeholders were found missing or insufficiently used in several contexts, both on the national and on the sub-national level.
- A notion permeating many contributions is that the effectiveness and added value of policies and measures – in the field of energy efficiency and beyond – can be enhanced significantly when these are grounded on meaningful communication with and involvement of stakeholders and society. For transformational policies in particular, '*it is crucial to get everybody on board*', as we heard from the policy community.
- In essence, this view builds on the recognition that policy frameworks as well as individual policy instruments deliver better results if those affected by them are given the opportunity to feed their views and expertise into the adoption and implementation process, e.g. by means of consultation processes,

parliamentary hearings, moderated stakeholder dialogues, engagement processes for citizens, etc.

2.6 Social impact of the transformation

Target groups also addressed aspects related to the social impact of the energy transition, including but not limited to the business stakeholder workshops held for Bulgaria, France and Lithuania. Central topics in the discussion of the social dimension were structural change in coal regions, just transition and energy poverty. Relevant storylines target groups voiced in their input comprise:

Just transition:

- Stakeholders stated that a just transition must be guaranteed and the question of who covers additional costs addressed, also extending to energy efficiency measures such as energy renovation of residential buildings.
- The just transition is expected to be a painful transformation process so good examples should be given not only from the political sphere but also from experts and social actors. A transfer of experience is needed. There is a need for a larger campaign showing people what their future can be.
- The job impact of energy efficiency needs to be better communicated. Creating educational and transformational jobs, educating pupils on the energy transition and energy efficiency issues, convincing young people to choose related professions, and developing new jobs is key.
- Energy businesses need to be involved in the just transition for coal regions in transformation since affected citizens would rather trust actors with good practices and market experience rather than political actors in certain contexts.

Energy poverty:

- Energy poverty is identified as a structuring challenge in several national debates. Accommodating the needs of low-income households can therefore be key, including through social housing, providing affordable energy renovations and adequate financing avenues. Related debates also extend to affordable energy for mobility, particularly for rural and peri-urban communities.
- Stakeholders observed the absence of a common definition and understanding of energy poverty both nationally and EU-wide as challenge for addressing the issue. Income, energy prices, building status and consumption patterns were suggested as elements to be considered for such definition.
- Stakeholders ask that public programmes aimed at promoting energy efficiency are designed in ways that take into account the socio-economic profile of target groups. Efficiency programmes should be well-targeted in their design and grant low-income households with particular support, e.g. through higher funding rate for energy renovations.
- Stimulating behavioural change is seen as a further component of addressing energy poverty. Awareness and motivational campaigns are needed. Positive compensation of the individuals could be a focus, as well as developing attractive attributes and a corresponding image of energy efficiency solutions, e.g. with regards to home smartness.

4. Relevance across stakeholder groups

Generally, we find that the key themes distilled from the stakeholder input and the selected, more specific topics of the case studies are found relevant across all target groups addressed with EEW4, i.e. policymakers, business stakeholders and energy experts. In line with their prevalence in societal debates, economic and financial considerations and related narratives of energy

efficiency are a major focus across all target groups. Of course, the specific approaches and angles on the subject vary somewhat across geographic contexts. As could be expected, this is even more true for issue areas that often feature a regional focus, such as the theme of just transition for transforming carbon-intensive regions. We found that related issue areas of social justice, energy poverty etc. appear more prominently with the business community and decisionmakers than with the energy expert community regarding their perceived salience in debates around efficiency debates. Narratives with industry policy and macro-economic rationales featured prominently among policymakers and energy experts, while themes of adequate education, training and research and innovation were brought up by the business community in particular.

Across the topic areas addressed with the case studies (cf. section 5), a number of interlinkages and potential synergies can be identified. This applies to narratives operating in the same issue area such those speaking to business case and financial considerations, but also across issue areas, for instance if we consider the links between just transition and needs for training, research and innovation.

5. Focus themes for narrative analysis

Based on the analysis and clustering of target groups' input, the project team identified the topics that were elaborated into ten case studies. These focus topics were selected with regards to their relevance in general public debates and for the project, their identifiable patterns and key storylines of resonating narratives, including for dealing with counter-narratives, as well as for their opportunities for learning and transferability to other contexts. Coverage of different situations and sectors across the EU was accounted for, too. Table 1 provides an overview of the topics addressed by the ten case studies developed by the EEW4 project, as well as an outline of their respective scope and how they fit into the overarching themes that the stakeholder input was clustered by in a first step in section 3. A more detailed outline of each study is presented in the following section.

Each case study follows the same structure, offering:

1. a summary of the narratives' key tenets;
2. pertinent storylines and examples collected from target groups;
3. an analysis of the narrative's rationale and functioning principles;
4. a description of relevant implications for policy and policymaking;
5. an outline of the overarching EU context in which the narrative operates;
6. an assessment of the narrative's potential for transferability into other contexts.

It was decided against tying the analysis in each case study to a specific policy instrument as the former have been found to have broader relevance beyond individual measures, typically also transcending a given national or regional geographic context. Relevant conclusions for policy design and implementation are, however, included, so that according orientation is still provided.

Task 4.1: 10 case studies, preliminary version

Deliverable D 4.1 Preliminary Case Studies

Table 1: Overview of key themes and narrative case studies

	Overarching theme	Focus narrative	Case study scope
1	Business case and financial rationales	'Only talk about the real business case'	Putting financial viability of energy efficiency measures at the centre, need to translate non-energy benefits into economic terms
2	Business case and financial rationales	Energy efficiency as integral improvement of the production cycle	Building a new vision on energy efficiency beyond direct savings as a means for comprehensive business optimisation
3	Macroeconomic and industry policy rationales	'It is beneficial to be a front-runner'	Leveraging the aspiration for policy and technology leadership to stimulate industrial development, employment and competitiveness
4	Technology image and popular perceptions	Successfully communicate the shift away from outdated technologies	Key potential of marketing and image campaigns when financial incentives show little effectiveness
5	Education, research and innovation	Education, training and upskilling as a strategic vector for the carbon neutral transformation	Addressing skills and education gaps to unlock the full potential of the energy transition
6	Education, research and innovation	Empowering research and innovation to fuel the carbon neutral transformation	Inclusive collaboration between education, research and business innovators to foster the development and uptake of energy efficiency solutions
7	Transparent and inclusive policymaking	Need to ground energy efficiency on transparent foundations	Underpinning energy efficiency policies with clear and transparent data on metrics, potentials and required steps to maximise societal buy-in
8	Transparent and inclusive policymaking	Communication and policy dialogue with stakeholders and society	Meaningful stakeholder involvement as an opening to stimulate acceptance, strengthen inclusive narratives and achieve better policies
9	Social impact	'Just transition'	Building robust narratives for the strengths and opportunities for carbon-intensive regions undergoing transformation

10	Social impact	Transformation in line with social justice	Flanking carbon pricing with smart social policies and enabling vulnerable households to take energy efficiency measures to secure societal acceptance
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Task 4.2: Testing of narratives at National Parliamentary meetings

Deliverable D 4.2 Event Report testing at National Parliamentary Workshops 1-3

Irish National Parliamentary Workshop

Event summary

The main objective of the workshop was to trigger a fruitful discussion on the latest situation on energy efficiency and renewable energy sources development in Ireland and more specifically the European Green Deal, the Climate Law and the Recovery Plan that will improve the status of the Irish National energy efficiency and renewable energy sources legislation and instruments. The discussion aimed for was between Members of the Irish and European Parliament, representatives of ministries, industry, NGOs, scientists and other stakeholders.

Input collection

Session 1: Opening session: Renewable Energy and Energy Efficiency - Setting the ambition for renewables and energy efficiency for Ireland

Jan Geiss, Secretary General, EUFORES and Chair of the workshop, welcomed the speakers and the audience to the workshop to discuss the adaptation strategy on the Green Deal and the National energy and Climate Plans.

Brian Leddin, Member of the Irish Parliament:

- Our targets are one of the most ambitious in the world: we want to produce in Ireland 70 % of energy from RES by 2030.
- We have to do things quickly; it is possible and it is the right thing to do. The convergence of technology and knowledge will make us an international exporter of RES. Input speeches

Eamon Ryan, Minister for the Environment, Climate and Communications and Minister for Transport:

- EUFORES has been an incredible place to share best practices.
- We have lately managed to show leadership that comes from participative politics, starting with an interparliamentary committee that took Climate Action seriously and setting ambitious goals.
- We stopped investment in fossil fuels.
- Our updated climate plans are very ambitious in energy that will require huge ambition. 70% RES by the end of 2030 is ambitious.
- We have a lot of work to do, a large part will be switched with offshore technologies.
- It is critical that at this stage there is more integration in the European electricity grid. It is the moment to start delivering and it requires collaborations with and from all our neighbours.
- Energy Efficiency First principle is being applied in renovations of the building stock. It will assure secured well paid jobs and no energy poverty.
- We need to first restore nature and need sustainable ways of producing energy.
- Political context: to make this work all our neighbours have to work together, energy transition cannot happen in isolation. As the island behind the island, we have to make sure we have good energy cooperation with UK and France and Belgium.

Hans Van Steen, Director RES & EE, DG Energy, European Commission:

- The Commission is pleased to be here, these EUFORES workshops are an amazing opportunity on exchange with and between the European Parliament and National Parliaments.

- We need to take decisive action to tackle the climate crisis to create jobs and reinstate growth. This is what the EU Green Deal is meant to do. The energy sector is the core of the Green Deal. At the same time the recovery efforts and new instruments at the EU level are being activated.
- The revised EED will be published soon as part of the Fit for 55 Package.
- We need to improve EE across all areas of the value chain, deployment of clean energy and RES, and we need to look at how we can better integrate our energy systems. Electrification will be key.
- Per capita green gas emission in Ireland is the highest in the EU. You are on the right track when it comes to RES; 70% RES by 2030 requires massive investments in offshore technologies.
- The Commission also welcomes the strong emphasis on building renovation and to have a dedicated public sector obligation. Building renovation not only fighting climate change, but improves health and wellbeing conditions.
- We get the impression that the focus of EE is not as strong as RES, we will not meet our ambition if we keep on wasting energy. We hope there will be higher ambition in EE.

Ciaran Cuffe, Member of the European Parliament and EUFORES president:

- We will see a massive increase in offshore wind and ocean energy in Ireland; large offshore RES is working wonders in our grids.
- We need to link our energy grid together with the EU's and the UK has to be part of this initiative. Challenges to manage the interconnectedness from Ireland to Scotland.
- EU legislation: it will be an interesting summer as in one month we will see the Fit for 55 Package presented. Fit for 55 package is the logical package of this Green Deal.
- Ireland can and should be a leading player in the Offshore RES. We will see more green jobs and less reliance on fossil fuels.
- Winning hearts and minds in Ireland and the EU is key to bring more people onboard in this journey.

SESSION 2 Energy Efficiency – EU energy efficiency policy implementation in Ireland

Robert Deegan, Department of the Environment, Climate and Communications, DECC:

- There is a focus on the residential sector in Ireland, the intention is to halve the greenhouse gas emission in the sector by 2030 through a program to upgrade homes, install heat pumps in existing buildings.
- We need to take a comprehensive approach to our plan, we identify 4 pillars, driving demand and activity. Pay for these retrofits, have supply chain and workforce, structure, and governance of this complex phase.
- We will drive demand through a national campaign about education on the benefits of EE and information about heat pumps.

Joe Durkan, Programme Manager, Energy Efficiency Obligation, Sustainable Energy Authority Ireland

- I will give an overview of the Energy Efficiency obligation scheme and what the new directive means for the scheme.
- Parties have to abide by their targets otherwise they will be subject to buyouts or penalties.
- The obligation scheme has been successful, and it will deliver Irish retrofit targets.

- In the first 7 years the scheme contributed to 80% of the total national energy action plan achievement under the directive. It brings a substantial contribution to our targets. Stephen O'Connor, CEO, Electric Ireland Superhomes
- SuperHomes has been deep retrofitting homes since 2015, 30% of the market.
- We know the challenge and the transformation required.
- The One Stop Shop Model is aiming to make progress for upgrading homes much easier.
- We take care of the Awareness and Marketing, Consideration & Sale, Designing tenders, Quality control, Advocacy, Paperwork, Grants & Finance.
- How do we scale up? Massive change will be required, we will need regional hubs to scale up and deliver.

SESSION 3 Energy Efficiency – Open discussion: enabling factors and barriers for implementing energy efficiency in Ireland

Daniel Becker, Director, Guidehouse first presented the EEW4 project, the survey results and the role of narratives.

- We have a massive lag in implementation of EE policy; we can shape the instruments to boost the implementation better.
- It has to do with societal consensus. In countries where governments that shared positive narratives about EE broadly, implementation was much more successful.
- We did a survey on EE in Europe checking about the topics that promote EE.
- Jobs, industrial competitiveness, modernization are the best narratives that promote EE.
- From a narrative workshops organised we concluded that:
 1. It is clear that countries want to be the forerunners
 2. EE is seen as an integral optimization of the production cycle
 3. We need only messages about a real business case and transparent foundation for EE achievements
 4. Understanding your client is key: talking about the image of technologies
 5. Just transition and only where compensation is really needed
 6. Communication is key in the role of stakeholder dialogues
- Which experiences in the described context have you come across? How would you incorporate the narrative process into the legislative process?

Conclusions and key themes for narrative development

The event presented the current situation for renewable energies in Ireland, and how they will be addressed via the National Energy and Climate Plans (NECP), considering the European Green Deal and Recovery Plan. Ireland has the ambitious plan to produce 70% of energy out of RES by 2030, and while the political scenario seems favourable we need collaboration at the EU level. Offshore technologies and wind energy are at the core of the Irish strategy, as well as the plans to renovate houses at a faster pace, reducing the costs of heat pumps and by refurbishing initiatives. The Second Session discussed success stories on implementing energy efficiency policies in Ireland and good practices for boosting investments. The intention in Ireland is that to halve the current greenhouse gas emission by 2030 thanks to the upgrading of homes. The Third session focused on the Energy Efficiency Watch 4 project and tried to create a better understanding of the national debate and motivation on efficiency policies and good practices. This session focused on the influential narratives in Ireland which are those of wellbeing and health; and thermo comfort is the biggest trigger for clients to retrofit their homes.

The younger generations look for comfort as a main driver to renovate.

Key themes participants alluded to regarding action on energy efficiency comprised:

- In the housing sector, comfort (and thus image of EE) is in many cases a stronger driver than cost / economic considerations => can be worked with more
- Qualification of planners, builders and installers is often seen as an issue => more effort required
- Good and long-standing experience with EE networks – participatory element, creates knowledge exchange and thus higher acceptance => good practice example to be shared with others
- EE not seen as key element to energy security

Dutch National Parliamentary Workshop

Event summary

The main objective of the workshop was to trigger a fruitful discussion on the latest situation on energy efficiency and renewable energy sources development in The Netherlands and more specifically the European Green Deal, the Climate Law and the Recovery Plan that will improve the status of the Dutch National energy efficiency and renewable energy sources legislation and instruments. The discussion aimed for was between Members of the Dutch and European Parliament, representatives of ministries, industry, NGOs, scientists and other stakeholders. Another objective was that to introduce the EEW4 survey results to the Dutch energy community in order to brainstorm on successful narrative development for the implementation of policies that aim at the energy transition.

Input collection

Opening words Jan Geiss, Secretary General, EUFORES:

- Presenting EUFORES
- We are touring the Parliaments of the EU27; we want to explain the Green Deal and the new directives. You will get the latest news from Brussels thanks to Niels Fuglsang.
- But this is not a top-down teaching. This is a joint effort to know what is going on in the Netherlands.
- You are in the negotiations for a new government, that is why the minister Stef Blok could not join.
- Thank you, Silvio for hosting the session.

Silvio Erkens, Member of the Dutch Parliament:

- A very good morning to you, thanks to EUFORES
- I welcome this initiative to engage stakeholders and experts on a discussion of EE and RES in the Netherlands.
- The subject of today's conference is well chosen, now it is time to implement the Green Deal into national measures to achieve new climate goals in the Netherlands and to implement the fitfor55 proposals.
- Support reduced target from 40% to 55% percent by 2030 compared to 99 levels and achieve neutrality by 2050.
- The negotiations for a new government are ongoing, we will have more ambition on climate policies at the EU level.

- There should be a coalition agreement before Christmas, to find out concretely the climate policy in the Netherlands.
- The current policy framework is based on the previous agreement from 2017, 49% reduction by 2030.
- We have a climate agreement involving all different stakeholders to turn our goals of the climate agreement into actions.
- Combatting climate change offers great opportunities, NL has the potential to become a world leader in smart, clean and energy efficient technologies.
- I am interested to hear what other speakers have to say.
- Thank you for your attention.

Session 1: Renewable Energy and Energy Efficiency

Niels Fuglsang, Member of European Parliament and Vice-President of EUFORES:

- It is an honour to be here and listen to this discussion about the NL,
- At the EU level we have negotiations on the laws that need to make sure we reach the targets of the climate law.
- Writing the target on a piece of paper is the easy part and now we have to make sure we reach the 55% target.
- As Churchill once said during the Great Depression, 'never waste a good crisis', we need to act decisively at the EU level to solve the crisis that we are facing. There is no downscaling of our ambition, we need to upscale the efforts rather than downscale them.
- This is the biggest economic package the EU has agreed on, 47% of these funds will go to climate efforts. RES and EE efforts.
- I am the lead negotiator on EE efforts. Over 40 % of the reductions will come from EE, there are huge potential for renovating buildings and using waste heat from data centres.
- If we increase EE that will be good for electricity bill payers that live in electricity poverty, and we will save a huge amount.
- 44 million households at the EU level are in energy poverty, if we increase energy efficiency it will be good for electricity bill payers. The EU commission has proposed that we reduce energy consumption by 9%.
- The RES and EE directives will be key pieces of legislation to deliver on the three crisis I refer to: most importantly the climate crisis. But also, the energy crisis, the economic crisis sparked by covid. I hope together we can go beyond these crises.
- Thank you for the discussion ahead.

Hans van Steen, Advisor, Coordination of the Just and Green Energy Transition, DG ENER, European Commission:

- Thank you, Jan and member of the Dutch Parliament, this is an opportunity to hear from the national level on the ground how they see the situation.
- It is important to calibrate our actions and create right policies.
- We have several crises going on at the same time, the climate crisis is the most important to tackle.
- The covid crisis gives us an opportunity and that is why the Commission created the Fit for 55 package to send the right signal to investors.

- Talking about the energy crisis, it is an unprecedented rise of the electricity. The commission has done an analysis of it and created a toolbox for action and support on raising energy prices.
- The situation has been caused by fossil fuels and it is not linked to what the Commission does as the response to the climate crisis.
- It is important that we take the measures to tackle the consequences for the most vulnerable, that is what we will do with this toolbox.
- The Green Deal is a top priority and equally a growth strategy for the EU. And it remains a roadmap.
- The EE and RED directives, the emission trading, CO2 and cars, taxations are a lot of topics being negotiated now. From the Commission we try to maintain integrity of the package.
- We need to improve our EE directive, step up ambition from 32% to 46 %, we need to make this target binding.
- Because EE is so important next week we will come out with a proposal on EE in buildings.
- We need to have more RES, we will step up our efforts in the RES directive and increase the target to 40% in two decades. We want to focus on RES heating and cooling an area in which we are lagging behind.
- We are aiming for a smart integration of the energy system, so that all sectors can contribute
- We issued a strategy for hydrogen, both of these strategies are important to guide the energy transition.
- Electrification, key avenue for cost effective decarbonisation and system integration.
- We are looking at aviation as a different sector to electrify and industry.
- As for the situation in the NL, we are pleased to see an acceleration in RES deployment. The target set in the current RES, 40%, there is a risk the NL will not meet this target.
- We are pleased that the NL have engaged in statistical transfers to fill that gap.
- The Dutch solar PV market is going strongly, and offshore wind parks have been built and are operational.
- We are coming out with guidelines to permit RES construction.
- The NL is a front runner in hydrogen, for the Commission and the NL hydrogen should be renewable. That is why it is important to improve in RES electricity to produce green hydrogen.
- By 2030 there is a plan to reach 4 gigawatts of hydrogen, aiming for RES electricity we are happy to see things are speeding up.
- Dutch government is pursuing the development of hydrogen infrastructure.
- NL is on track to achieve 2020 EE target; it looks better than on RES.
- The policies in the NL have been effective to bring more EE in the building sector.
- When we look at the Dutch NECP we do not want to see a slowdown of the measures we want you to meet the targets.
- On building we are impressed by the Dutch long term renovation strategy. A doc with concrete milestones.
- This objective to insulate 1,5 million residential buildings by 2030 to make the gas free, or gas free ready, it is a very good strategy.
- The positive picture we see from the NL, with the increased ambition proposed by the fit for 55 packages. We need to do more.
- I gave you a snapshot, now that all MS have agreed to our climate neutrality by 2050, we need to make progress urgently and be in track to our 2030 target.
- The energy sector is very important in the EU Deal.

Bart Hemmes, President, Youth for Climate Netherlands:

- It is not enough what we are doing. Young people are motivated to advocate for a sustainable future and fight the climate crisis. The climate crisis has a terrible influence on our future.
- Save the Children recently published a report on the effect of climate crisis per generation, people born in 2020 compared to people born in 1960 have 2.8 times as many failed harvest and draughts, more floods and hit waves.
- Based on the pledges during the Paris agreement it will affect the way we live now. I want to emphasise the urgency of what we are doing there.
- As for RES, there are 2 things to do. We need to change the way we produce energy and the way we use energy.
- Most houses are connected to the gas grid, we can use a heat network to use rest heat from data centres and industries. In Amsterdam they are looking for added heat networks, there will be a big heat network from data centres.
- Smaller municipalities try to use gas and the project did not go well as they needed to supply natural gas to the people that needed them.
- The government should intervene you cannot leave the building of heat networks to the municipalities.
- The final things on producing energy and supplying it to the houses is a strong electricity network.
- Businesses are unable to have big RES energy projects because the grids cannot handle that.
- In the NL we can do better than 55% reduction of CO2, there are a lot of opportunities.
- How do we use electricity we produce? Electric car, and more public transportation. We need to make cheaper and accessible to use public transportation.
- Finally, I would like to conclude saying, never let a good crisis go to waste!
- There is a lot of work to be done for the national government, young people want a future, and we are now at the point to decide what future we could have.

Q&A

Sander Detomb: Working for Ocean energy Europe, the ocean energy sector working from the Heek. How can the offshore renewable energy strategy provide opportunities for the NL?

Hand van Steen: Offshore holds a lot of opportunities and potential for additional RES energy. For the North Sea countries there is a huge potential and last year we set targets to the offshore RES plan, with a huge degree of wind parks. What has made all possible was the decrease of the prices in offshore.

In view of the hydrogen ambition in the NL, it is important we get add RES on stream. The target in the NL is quite low, seeing the slow beginning. But the NL has a lot of people and less space, offshore gave opportunities for that but there is a lot of potential to deploy still.

Els Struiving: I know a lot of young people are concerned. I am active in the energy cooperative in an energy community. We have a lot of students in Groningen but it is hard to involve young people in bottom up actions. How could we reach this group and make them energy active as well?

Bart Hemmes: I think it is smart to look at existing groups, there are activists all around the NL. A lot have local groups, like FFF have a lot of local groups, they also have one in Groningen. You could involve them and as Groningen is a student city you can involve the green office of the university faculties, to make universities more sustainable.

SESSION 2: Energy Efficiency

Bert Stuij, Manager Sustainable and Competitive Energy, Netherlands Enterprise Agency:

- I work in policy development and execution in the Netherlands Enterprise Agency.
- I would like to talk about energy efficiency policies and their relationship to climate policy.
- In the NL the emissions went down, overall, the industry and power production have the highest percentages of CO2 emissions.
- With the current policy portfolio, we would not reach the targets of 2030.
- From 1990 to 2017, the emission of greenhouse gasses fell but CO2 have been constant since.
- If we look at buildings, the 4 key features are gas free neighbourhoods, heat pumps as key element, renovation and insulation and heat networks. These are the cornerstones to achieve EE in buildings.
- If we look at industry: process integration and optimisation and electrification are main features to achieve zero emissions. Carbon capture optimisation is not the most efficient as it cost additional energy to have a power storage.
- As for the power sector, we move to renewables and the closure of coal plants is one of the crucial factors.
- In the transport sector: the electric transport allows to use RES and increases EE dramatically.
- Two examples from the industry show us the massive effects EE has on this sector. Many of our heavy chemical industry will benefit greatly from process optimisation by steam recompression.
- In Rotterdam we make the process more circular utilise waste material to remake steam and keep the energy in the system.
- The ambitions in the NL are likely to rise, they will be halved in 2030, net zero in 2050 and these will rise because of the EU Fit for 55 policies, COP26 which has influence on the speed of emissions reduction.
- We see energy efficiency in buildings, transport, and heating as a cornerstone of the policy package.

Hildagarde Mc Carville, CEO, Veolia Netherlands:

- As a services organization, we are affecting EU and national policies.
- We are taking a holistic and circular approach and by adopting digital tools, we help our clients to shift to more EE and RES and to realize energy savings and targets.
- We are an environmental services company from 1853. We help people get access to resources, especially water.
- In 2019 EU decided to be the first carbon neutral continent, this was translated in directives to realize that. Building is our 40% energy consumed in EU used and 45% of emissions.
- I am delighted that EU policy has not taken a silo approach and that the aspect of EE is only one part of the Green Deal.
- We need fundamental transformation, a more socially equitable society, to increase digital opportunity.
- On the translation from policy to the ground we have set internal tools and metrics to measure our processes to hit the 2030 target.
- These targets are being discussed transparently.
- Examples:

- Danone Estia, is the global benchmark for a production plant which is Zero Waste across the globe. Powered by 100% renewable energy. This plant required 60% less water, 25% less energy, 100% and 50% less Co2. It is zero waste.
- We also worked on circular re-use of heat and the DHN networks such as Ennatuurlijk which are playing a vital role in the RES strategy. We have reduced water consumption and Co2 and managed to recover the rest heat to feed in our grid.
- Another example of reusing rest heat is that of Egberts, famous for its coffee, based in Jure, NL. Example of how; legislation cannot be in silos, the company wanted to expand but landfills were being banned. The company was thinking about what to do with the utility supply contract.
- The approach to hit the Green Deal is to work on collaboration with others. We are working with municipalities, and we believe in the energy transition as key aspect of ecological transformation.
- In 2020 we recycled 610,000 metric tons of plastics, avoided 15 million metric tons of CO2 and produced 14.1 million MWh of renewable energy. Those targets are audited annually with full transparency.
- Going back to the concept of renovation, there is a need to have a 3% target coming through.
- We have a project on Holistic future fit solutions in buildings. We have been delivering this project during covid thinking about recreating the workplace of the future once the crisis will be over.
- The future office will be activity based to stimulate interaction and greenery will be incorporated in the buildings. The office will be a sustainable environment with 100% circular, zero waste renovation of buildings using the digital technology and tracking smartly elements like air quality. We are talking about giving new life on organizations.
- We as Veolia want to give reliability, comfort, optimisation of infrastructure and change our approach in terms of maintenance and reduce life cycle costs, the environmental impact and transparency.
- As we move from fossil fuels, we will need more flexibility to electrify but our grid is weak.
- We think that EE can be used in the role of public building going forward.

Els Struiving, Coordinator for the demo-houses in Paddepoel, Making-City:

- I am in a local energy cooperative, working on a HORIZON2020 project, called Making City, a living lab to test the energy systems on a district level.
- We are creating a positive energy district • What we did in the Making City project, a demonstration project where the municipality is in the lead
- We wanted to show how energy transition is working on a district level
- We have 4 demo houses right now; we are looking into retrofitting and monitor the energy system; we can see the social transition and how the citizens see these goals and what does the retrofitting cost.
- Bringing these questions to a very local level is what we do
- Paddepoel was built in the 60s, we have a mixed population with a lot of elderly people and a lot of students. What we did is search and find families who would join us in our journey, they are in the journey of transformation

- If you want to make an old house gas free a lot of challenges, come out, like affordability, isolation and finding a place.
- Some of the practical issues we are dealing with, we are using homeowners to tell other people what they are doing, dissemination of results.

Q&A:

Erik Barendsen: I am reflecting on Els presentation, I wanted to install a heat pump in an old house, the different companies refused to install a hybrid heat pump. I think they are cherry picking; I am interested to understand how Brussels looks at this. People want to do the right thing, but they are blocked by installation companies for whatever reason.

SESSION 3 Energy Efficiency

Daniel Becker, Director at Guidehouse:

- The EEW came into life in 2006, we are now in its 4 stages.
- We study policies in EE and the role of narratives.
- At the beginning of our project in 2007 there were barely proven EE policies. Today there is an impressive toolbox of EE policy instruments.
- What was seen as a weakness, the decentral approach of the EU has turned into a source of great variety and inspiration.
- Despite the fact we have excellent instruments, the political will is not given.
- In the Watch 4 there are no longer instruments in the focus but rather communicative strategies, such as narratives.
- We did a survey with 12000 energy experts, who gave inputs on narrative development.
- What is the importance in the public debate in terms of topics: jobs, industrial competitiveness and modernisation.
- The most influential people are Association of large industry, trade unions, chambers of commerce.
- A narrative is a conjunction of stories that play a part in the public energy efficiency debate.
- Another input format and output in form of case studies, where we developed narrative cases from business stakeholder workshops. We talked to companies from all sectors dealing with EE.
- The wish to be a frontrunner in EE came most prominently, because of innovation and jobs.
- I would like to open our discussion with the expert panel.

Expert Panel

- Question from Daniel Backer to Pieter Boot: When it comes to the frontrunner role in the NL, what do you recognise and how important the narratives have been so far? How do you expect them to turn into? How can we progress?

Pieter Boot, Head of Department of Climate, Air and Energy, Environment Assessment Agency:

- I want to make an important remark, what you mentioned in the example of Danmark, you make EE and energy transition in one subject.
- In the NL we are in a position where these subjects are different. That makes it complicated.
- In our energy and climate outlook, we forecast that final energy demand in the NL will decrease. It is mainly heat in buildings which is decreasing.
- The greenhouse gas emission will reduce quickly whereas energy demand will stay stable. Here comes my problem. For the NL both CCS and hydrogen will become important aspect of our

climate policies, but both will lead to increasing energy demands which when you define EE in a scientific way it is no problem.

- **But in the EU figures EE is calculated by checking the energy demands and therefore we will see that the NL with the new Government will succeed in decreasing greenhouse gas emissions but they will not succeed in attaining its EE directive article 7,** because these EED article is only valid for specific national policy instruments.
- In my view it would be better to have an optimal combination between national and EU policy instruments. This is not a case. In the NL this will raise a problem. This is a narrative issue, when we do not solve this problem the NL will have a suboptimal programme which will be very complicated as the NL will have to look at different story lines.

Arjan Oranje, Senior Programme Manager Energy Transition & Mobility, City of Rotterdam:

- Narratives are very important; we want to be influenced by and influence with. Narratives work well if they are for all of us.
- In Rotterdam we have a local Climate Agreement, and it is a result of a collaboration between several parties; industry and transport sector, who worked on a narrative to reduce emissions.
- **We want to have an attractive economical city that is ready for the future. I agree with Pieter that the narrative has to include EE.**
- Mobility, we have a three-rail approach to cut traffic. We have to change to more EE way of transport that is invest in bikes and public transport. **Governments cannot neglect public transport we need to have a narrative about that. We have to turn into more efficient type of approach and the second step is cleaning up mobility.**
- **In Rotterdam we have an example of community on urban logistics, and mobility. Together we wrote the narratives for the introduction of the zero- emission zone.** Getting it in place was done by a community of 7000 parties.
- Creating momentum to change now is important, employers know it can be more cost efficient if we change to electrical fleet.
- **Creating momentum for EE is important having a narrative only works if we get barriers out of the way.**

Els Struiving, Coordinator for the demo-houses in Paddepoel, Making-City:

- Local citizen groups can play in important role in making the narrative for their fellow citizens.
- I work with the municipal heat supplier and initiate a local heat initiative, what I found there is that we are planning a lot and making scenarios, but we don't go enough into the perspective of the owners of the house and the tenants.
- If you have a district heating, there are technical problems and there are problems with people associating district heating with a negative image. This also goes with renovation which is very costly for old houses.
- If we want to have a change, we should work on how to have citizens make the change with us. What is in it for them and what are their goals. Not just the overall goals and their private goals.
- We need to ask people how they think about it before making scenarios.

Erik Barentsen, Senior Policy Officer Energy & Sustainability, Dutch Data Center Association:

- We represent the data centre industry in the NL, a young industry.
- The narratives work currently not in favour of us, despite the fact digitalisation is seen to improve EE.
- **An industry running on sustainable energy sources offering residual heat to districts, we have a hard time convincing public and politics to build the right facilities and allow the necessary fund to use this energy to the most efficient way.**
- First building the internet where data centres are part of this system, and the electrical energy we use can be reused as thermal energy which could be used in district heating systems.
- **I have seen that the narrative is in my opinion a very compelling story, but we lack a success in the implementation.**
- I am trying to figure out why. We are having a hard time to make the narrative work.

Bert Stuij, Manager Sustainable and Competitive Energy, Netherlands Enterprise Agency:

- It's a very interesting work, you challenge yourself with the word narrative.
- The word narrative can be problematic and perceived as propaganda, not always welcomed perhaps. I do not know how to get rid of it.
- **What struck me in what you presented is that in the rationales which people identified to EE climate did not feature highly.**
- It surprises me, if I look at the NL, EE is always in the context of the climate ambitions and climate policies.
- **The rational for EE is not aligned with the rational for climate and sometimes they can diverge.**
- Whether your system is fed by RES sources or fossil fuels sources, the importance to reduce the demand of resources is fundamental. Producing RES puts into effort our landscapes.
- Without EE climate policy becomes very difficult.
- The urgency is to reduce the demand in material and EE.

OPEN DISCUSSION:

Arjan: We agree on the importance of narratives. But we need to investigate the narrative of the role of the government, because we have to provide the infrastructure but also the legislation and taxes.

- Legislation is the picture of the old way of living and not the new way of living. We need to use legislation; we need to take down the barriers in investment of infrastructure. A lot of legislations are holding back the transition.

Daniel: industry can invest money and time in developing study programmes and collaborate with universities, the typical underground plumber cannot. Their pattern of training is once in a lifetime, this spreads the image of not using innovation.

- If you overcome the barrier and work with a neighbourhood, that is a connection with the rethinking of using legislation which triggers to work on EE.

Els: We used the motto "Make Paddelpoel great again", as a narrative, people responded to it very

well. What I am missing on the instrument side is people do not know what to choose, what solution, what EE solution because, they do not know where we are going.

- If we want to get a larger group moving, we have to show them this is where we are going. We need to have financial instruments tied to the building and not to the people. We need to make the solutions easy, not just by subsidising but it has to be easier and accessible and clearer where we are going and is this the right decision for me as a citizen in line with the government.

Erik: I agree there is a lack of direction often. The polar mode, everybody has a say in decisions and if you have 5000 households you get 5000 opinions on how they want to make their homes more sustainable. There are so many options.

As a data centre industry, I would like to have a comment on that, we provide low temperature heat, which is enough for a medium isolate house. In the narrative we usually hear “let’s go for high temperature district heating systems”. We have to focus on general energy reduction. And high temperature residual heat is not the most efficient way to warm households. We are struggling with this discussion in the NL. If you leave your consumers in doubt they will wait and that is not a good idea.

Bert: I would add one thing to the complexity you listed, decisions which are made too early can turn out to be wrong. You feel the urgency, there is this fear which hampers progress to take the right directions. What would be the best way to move away from gas? 70 % of neighbourhoods got a different outcome to our question, and we saw a lot of difference between the first time we asked the question and the second. In time people change their mind.

Piter: To build on the comments before, said we have to distinguish between two aspects, industry in the NL will become CO2 neutral and they will make their own big decisions once in the next 20 years.

The government has to connect this with a good infrastructure, this is clear as a story line. The uncertainty is in the cities. This will be connected with what industry will do. We have to accept that sometimes wrong decisions will be made.

Daniel: Thank you for the enriching contribution to our project, we need to get engaged in more discussion on how to combine policy making and find smart ways to think about transformation of society and data transparency and transparency on what the narratives are based on . We need to sustain the contradiction between decisions no to be made to give a direction early but also on where we are moving to prevent attentisme.

Conclusions and key themes for narrative development

The event presented the current situation for energy efficiency and renewable energies in the Netherlands, and how they will be addressed via the National Energy and Climate Plans (NECP), considering the European Green Deal and Recovery Plan.

As for the situation in the NL, there is an acceleration in RES deployment. The target set in the current RES, 40%, there is a risk the NL will not meet this target. The NL have engaged in

statistical transfers to fill the gap from RES. The Dutch solar PV market is going strongly, and offshore wind parks have been built and are operational. The NL is a front runner in hydrogen, which should be renewable. That is why it is important to improve in RES electricity to produce green hydrogen.

On building the Netherlands is doing an impressive job, the Dutch long term renovation strategy should be an example. The objective to insulate 1.5 million residential buildings by 2030 to make the gas free, or gas free ready, is a very good strategy.

We have seen many successful EE projects from different Dutch companies. The main lesson learned is the importance of reliability and transparency, optimisation of infrastructure, and a reduction of life cycle costs and environmental impact. As we move from fossil fuels, more flexibility will be required and more effort should go on a creating a stronger grid.

Building on the EEW4 project, all speakers have underlined the importance of narratives to advance in EE actions on the ground. The narratives used should be based on data and be more transparent. We need to get engaged in more discussion on how to combine policy making sustain the energy transition on the ground. We need to give more direction on EE to citizens to prevent attentisme.

Key themes participants alluded to regarding action on energy efficiency comprised:

- Front runner narrative is in some areas quite strong and can be worked with
- Generally positive attitude to economic change and technological innovation
- New business models and showcase projects have strong positive impact
- Education, upskilling and training is in some areas an issue to be addressed
- Local and regional knowledge sharing and end consumer advice provides good results, helps making right investment decisions (e.g. on building renovation and heating change) and fosters acceptance
- Availability of easy to understand and verified data can be improved
- Good practice examples on participation of the civil society (e.g. e mobility planning in Amsterdam) => can be shared more broadly

Greek National Parliamentary Workshop

Event summary

The main objective of the workshop was to trigger a fruitful discussion on the latest situation on energy efficiency and renewable energy sources development in Greece and more specifically the European Green Deal, the Climate Law and the Recovery Plan that will improve the status of the Greek National energy efficiency and renewable energy sources legislation and instruments. The discussion aimed for was between Members of the Greek and European Parliament, representatives of ministries, industry, NGOs, scientists and other stakeholders.

Another objective was that to introduce the EEW4 survey results to the Greek energy community in order to brainstorm on successful narrative development for the implementation of policies that aim at the energy transition.

Input collection

Jan Geiss, Secretary General, EUFORES and Chair of the workshop:

- We would like to learn about your NPC and upgrade through the recovery plan. There is a lot to learn from you.

- Dionysia is a great ally of EUFORES, you are a chairperson of the Greek committee

Dionysia Avgerinopoulou, Member of the Hellenic Parliament and Chairperson, Special Permanent Committee of Environment Protection of the Hellenic Parliament:

- This discussion is very timely, to promote RES and EE seeing the challenges we face today, CC, atmospheric pollution, health crisis.
- Today's webinar is organized in cooperation with EUFORES, and the committee of environmental protection.
- Our session will raise key political issues, energy transition and funding opportunities and increase in RES in our country.
- The recent increase of price of energy because of the price rise in oil, shows how much we are dependent on fossil fuels.
- We are a few days just before CO26 in Glasgow, Commission's fit for 55 packages will support the transition, it is intended for the entire EU community and coupled with the EU Green Deal, it will create a specific green development model to achieve the target of decreasing greenhouse emissions by 2030. And reach EU Climate Neutrality by 2050.
- We must undertake legislative initiatives to cut down on energy promotion for the benefit of everyone. Including houses businesses, SMEs.
- Greece is staying ahead trying to participate as actively and responsibly for the ambition of EU, **we will do everything possible to keep our commitment maintaining the temperature under 1,5 degrees Celsius.**
- Greece has developed ambitious policy for decarbonization of the economy. We are stopping lignite, joined RES, our initial commitment was to **shut down lignite by 2028 but we are on track, and we will manage the decarbonization in 3-4 years.**
- We launched **new programmes for EE in our buildings.**
- RES are at the heart of the plan, which is the roadmap for the country.
- Greece has included large part of **RES and energy projects, this accounts for 48 %.**
- The **National Deforestation Plan has been launched with a budget of 100 million.** The cultural monument protection is another major project to protect the monuments from climate change.
- Today in the Greek parliament, we are finalizing bills of the energy and energy efficiency targets. **Greece has adopted the EE target regarding efficiency. Our target for consumption for 2030 has increased to 40 %, we pursue the penetration of RES across the economy.**
- We are moving on with a plan of a new climate bill, which will support our targets regarding energy neutrality. And revision review of national climate and energy plan. We have adopted a lot of initiatives for green responsible investment and innovation when it comes to RES sources.
- The discussion of the fit for 55 package, we have dedicated a lot of sessions of the committee of environment protection on the issue on energy.
- Part of fit for 55, will be **ship upgrading and ship efficiency. 100 % electric ships that we need to build.**

SESSION 1 Opening session: Renewable Energy and Energy Efficiency

Antonis Marinos, Head of Office, General Secretariat for Energy & Mineral Resources, Ministry of Environment and Energy:

- Today I will go in detail on the role of RES and EE for sustainable recovery in Greece.
- Last summer **climate change has become once again obvious** we saw devastating fires in Greece and EU, floods.
- We adopted a package of proposals to enable Member States to reach a higher target of CO2 reduction of 55 % by 2030.
- We will see a high increase in the use of RES and an increase EE targets. **According to figures: the overall production of RES is 55%, we will have zero emissions by 2045.**
- We are doing a high number of building renovation, to apply EE measures in buildings. **There will be 150.000 new jobs in construction alone. New target for EE raised to 49%.**
- **We have to increase RES penetration by 45 %, this is more than 60 % in electricity generation, and reduce pollutants.**
- Achieve energy saving in energy consumption and achieve these **targets for RES to 19 gigawatts.**
- **To reach the goal we are standing at 11 GW, for PV, the figure is achievable.**
- **Delignification of economy continues at a rapid pace, dropped to less 11 %.**
- While renewable energy is production and it's a market, **energy efficiency is a win-win situation for all parties involved and contributes to combat climate change. Everyone who is involved in energy efficiency wins, from all society levels.** We will continue to accelerate the increase of energy efficiency.
- **Through all programme funds we have 5 billion euros for EE in building alone in grants.**
- Regarding the resources and funds: during the next partnership agreement 21- 27, **our ministry allocated another 6.2 billion on RES. About 1/3 of funding will be for the green circle project managed by the ministry.**
- It is an imperative we continue, and we strive for better results.

European Green Deal on the Greek energy transition

Hans van Steen, Deputy Director General, Coordination of the Just and Green Energy Transition, DG ENER, European Commission:

- We began negotiations on the Fit for 55 package and we have an **important pipeline of proposals on buildings.**
- **Talking about the sharp increase in energy prices in electricity and gas which hit the headline, the Commission came with a communication on this with a toolbox on how to address this situation and to explain why this is happening.**
- **The increase in price, is linked to the increase demand for gas as the economic recovery is picking up after covid. We can notice that RES prices are lower and more stable than fossil**

fuels. This is another reminder of why we need to move faster towards the energy transition.

- Green Deal, 75 % of energy consumption comes from energy so its good to talk about it. The Green Deal should be seen as a growth strategy. The energy sector should be transformed enormously. The objectives have been endorsed and now the targets are binding.
- With the Fit for 55 we are writing the right legislations that match these targets. This package puts a strain on legislators and MS.
- **The first thing we have to do is to improve EE across all sectors in the value chain.** The package contains the Revision of the EED, important principle of EE first, we need to implement this target and make it binding at EU level.
- Buildings is super important; the timing is challenging.
- We need to look at how to optimise the energy system as such, we need to link what we are closely to the energy sector and what happens in industry, buildings, transport.
- **Greece is meeting its objectives for 2020 of 20% the RES share. Greece has set an ambitious target of 40% of RES in 2030. You are on track on RES with solar and wind.**
- We are pleased Greece has set a target for facing out of fossil fuels, which is hard seen the dependency on lignite.
- We are talking about significant investment projects in Greece.
- **The picture is different in EE, we could do more to tap the potential and the target set in the NCP is on the low side especially on building renovation.**
- **More could be done on the renovation of building and the financing directed to it. 1.3 billion to building renovation is what you want to allocate but it is not enough. Finding ways to diversify the financing.**

The role of the European legislation for the Greek renewable energy and energy efficiency policies

Maria Spyraiki, Member of European Parliament:

- Thank you, we work together o exchange views on how to proceed on fit for 55 package.
- I will start by making a comment on the energy prices, the increase of gas prices is caused by high natural gas prices and grow demand cause after the pandemic. The cost of fossil fuels has increased, the EU announced measures to alleviate pressure of the consumes.
- The energy mix is a national competence, it depends on the Nations to alleviate these prices too.
- With vulnerable infrastructure, the district heating will create future proof infrastructure, the target is achieving 55% of reduction of emissions is very important.
- EE can be as important as energy supply.
- Electrification: is important not only for constructing new capacities, to modernize infrastructure, an important condition for making electrification work is the availability of carbon free electricity, it must be affordable for business and homes. The CTS will be revised and will ensure carbon prices won't increase that quickly, but to expand RES supply and more will be needed to maintain affordable prices.
- In conclusion the most important way to tackle climate change and to solve our issues is to focus on energy efficiency. Energy efficiency will use technologies that will help achieve energy savings. The previous directive was lacking on the implementation. Most of MS are

now on board. Our binding targets of 3% of reduction in public building will be an opportunity to ensure an improvement.

- The revision of the building directive has to match the revised energy efficiency target, there is a need of comprehensive view and connection of building through a system with electrification powered by renewable energy. A new spatial framework for RES.
- We need to streamline the green legislation with EU legislation for investments, we need to provide predictability.
- We need to look at green hydrogen and introduce scale green public procurements in Greece. We need more and adapt fast; we need to monitor the implementation.
- Thank you

Questions from Members of the Hellenic Parliament

SESSION 2

Chair: Jan Geiss, Secretary General, EUFORES

Daniel Becker, Director, Guidehouse:

- Since 2007 we have been collaborating in the **Energy Efficiency Watch, now we are at phase 4 where we focus on the narrative for well-designed policies in energy efficiency.**
- The matter of narratives has usually been underestimated. **The EU27 has succeeded in developing excellent policies for toolbox.**
- **But if we can create policies, why is it so hard to implement them?** Where is the political will? How to influence that?
- What we found speaking to stakeholders **is the matter of narratives which has been underestimated.**
- Regarding our findings, we have created two outputs in this narrative package. One was a survey where we asked experts in **EE what is the most important aspect when talking about EE? We found that Jobs rank the highest, thereafter Industrial Competitiveness and thirdly Modernization.**
- When we asked the relevance of Actor Groups in their opinion, Association of large industry and trade unions and chambers of Commerce.
- **We have also collected case studies from business stakeholder workshops to develop better narratives.**
- main 10 narratives:
 1. Wanting to be a forerunner
 2. EE as integral optimization of production cycle
 3. Only talk about a real business case
 4. Transparent foundations for EE achievements
 5. Understand your clients: working with the image of technologies
 6. Just transition is compensation really needed?
 7. Communication is key- the role of stakeholder dialogues.
 8. Research innovation
 9. The right pace for workforce qualification
 10. Who is price sensitive and how to discuss cost distribution?

Yanna Nikou, Head of the Executive Authority of the PA, Energy Sector, Ministry of Environment and Energy:

- We will present a programme we have been implementing in the past, since 2011. Programme for residential consumers and financing instruments.
- **We had several phases in the restoration in the private building sector.**
- The basic objectives of the project are that to **improve the energy efficiency of the housing building stock, the energy upgrade of a great number of households and the attraction to the programme of low-income households.**
- The main characteristics are a mix of incentives, subsidy of the given interest, set an energy target and eligible interventions.
- Financing and the private funding: maximum eligible budget of interventions including VAT does not exceed 25000 euros per property.
- **Between 2021 and 2022 we plan to finance EUR 1,35 billion RRF**
- With energy renovation of at least 105.000 households and incentives for energy poor households.

Kostas Komninos, Director, DAFNI Network of Sustainable Greek Islands:

- Greece hosts a diverse number of islands, so this is a significant experience when it comes to **energy transition of the island.**
- I will take you to the island perspective, which gives an integrated idea of potential interventions and talk about the project “Challenges and opportunities for islands’ clean energy transitioning”.
- In Greece there are many interconnected islands that produce electricity, the average of the mainline system with strong incentives for decarbonised islands.
- These systems often lack stability, and we need to take care that with decarbonization we still guarantee the energy safety of the systems and ensure a stable frequency in the island and avoid blackouts.
- Reflect peak periods. Several other challenges when it comes to islands the scenery and landscape is unique. Sensitive ecosystems. Problem water, additional energy.
- **We are working on the ‘Smart Islands Initiative’, our island Kythnos has been a living lab of technological innovation on clean energy transition.**
- It was the birthplace for wind parks in Europe. We created an **integrated systemic approach, when it comes to producing energy but also mobility solution and efficient street lighting but also power our transportation, water, and waste management**
- The **island’s transition in a smart and sustainable development model** brings local economic development.
- There is a declaration among island and EU level, on the commitment of other islands.

Conclusions and key themes for narrative development

The event presented the current situation for energy efficiency and renewable energies in Greece, and how they will be addressed via the National Energy and Climate Plans (NECP),

considering the European Green Deal and Recovery Plan.

Greece is meeting its objectives for 2020 of 20% the RES share. Greece has set an ambitious target of 40% of RES in 2030 and is in track with solar and wind energy. We heard about the willingness to scale up PV and reach 19 gigawatts of production. The ambition is that to produce 45% of energy out of RES by 2030. Furthermore, there is willingness to shut down lignite by 2028. As part of fit for 55, Greece will be working on ship upgrading and ship efficiency to 100 % electric ships that we need to build and on smart islands initiatives.

The picture is different in Energy Efficiency, according to the view of the Commission more could be done to tap the potential and the target set in the NCP is on the low side especially on building renovation at the moment. However, the ministry pointed out that during the next partnership agreement 21-27, the Greek ministry allocated another 6.2 billion on RES. About 1/3 of funding will be for the green circle project managed by the ministry.

Furthermore, there is awareness that Energy Efficiency will bring 150.000 new jobs in construction alone. New target for EE has been raised to 49%. More interventions during the workshop sustained the importance of energy efficiency as a win-win situation for all society level and it contributes to combat climate change.

The Second Session discussed success stories on implementing energy efficiency policies in Greece and good practices for boosting investments.

Key themes participants alluded to regarding action on energy efficiency comprised:

- Modernizing the building stock is very important
- Cost and subsidy levels play an important role => should be used more strategically
- Find ways to better mobilize private investment
- Tourism and specific solutions for islands are important areas / provide potential
- Conservative attitude of planners, builders and constructors is a big issue
- Negatively affects image building of new technologies
- Upskilling, training and education urgently required
- High potential seen in innovative business models, job effects etc.

Task 4.3 Testing of narratives with network partners

In a policy seminar with ECEEE on testing the narrative cases, also the results of the multiple benefits project were taken into account:

<https://www.mbenefits.eu/news-resources/library/?f=cases-examples>

In a seminar with IEA in January 2022 (postponed from Oct 2021) those were discussed in combination with EEW4 narrative cases

Industrial efficiency narratives in an energy efficiency multiple benefits context

Fall 2021 workshop and seminar plan

Summary

Eceee dedicated its annual in-person Brussels policy seminar to the EEW4 project and the question of how we can inform, refine, and strengthen the energy efficiency industrial-focused narratives under development. To prepare for the seminar, we will hold a virtual workshop with participants from the Horizon 2020 EEW4 and key experts. The policy seminar will be held in Brussels on 25 November and the virtual workshop in October.

Background

Energy Efficiency Watch (EEW4) is an EU-project investigating the "real-life" progress of energy efficiency policies in European countries and what can be done to accelerate progress. The results of recent survey of 1,270 energy experts across Europe shows that energy efficiency progress in policy fields remains frustratingly slow, and that the level of ambition in policy development and implementation keeps fluctuating in Member States.

A key finding is that the "Why" behind energy efficiency is often lacking in the dialogue. EEW4 aims to contribute to a deeper understanding of what constitutes a successful narrative for energy efficiency, and to furnish experts with these compelling narratives, communication tools, and good examples. The desired outcome is to empower energy efficiency experts and practitioners to better influence politicians and policymakers at the EU-, national-, and local levels and hence speed progress on energy efficiency across Europe.

What do we mean by "narrative"?

Narratives can support the energy transition, but "counter narratives" can also work against energy efficiency. A study from the EEW project identifies topics of high importance in society, since these are most likely to catch people's attention and get them interested in related benefits. In the EU27, jobs, **industrial competitiveness** and **investments** are of highest importance in the public debate. Topics of much less interest were housing/living costs, air quality, independence from other countries and rural development.

These topics are linked to energy efficiency in a positive or negative perspective. For example, a counter narrative can be; the energy transition is stealing the jobs in the coal regions, we have already implemented all the possible measures in our country/company, or; the rebound effect makes energy efficiency pointless. Examples of positive narratives are: energy efficiency makes our neighbourhood more

Workplan

This fall, eceee plans to dedicate its annual in-person Brussels policy seminar to the EEW4 project and industrial narratives. The purpose is to inform, refine, and strengthen the industrial-

focused narratives under development. To inform and prepare for the policy seminar, we will hold a virtual workshop on 28 October 2021 with a small number of key invited experts. These participants will be drawn primarily from the Horizon 2020 Multiple Benefits of Energy Efficiency project and eceee board.

Virtual expert workshop – Industrial narrative

<i>Project Partner:</i>	Borg & Co
<i>Title of the event:</i>	Virtual expert workshop – Industrial narratives and multiple benefits
<i>Date & location:</i>	28 October 2021, 15:00 to 16:30 hrs, Online
<i>Organiser(s):</i>	Borg & Co
<i>Number of Participants:</i>	19
<i>Summary of the event</i>	<p>Nils Borg: The concept of Multiple benefits as a narrative, by itself, does not work. There is a need for a deeper understanding of what the different Multiple benefits' projects have been dealing with. We need to harmonise our thinking of Multiple benefits to avoid the concept (and underlying aspects) being disregarded.</p> <p>We need to understand where we are. We speak at many different levels: Policy level, consumer, business level etc. One conclusion of the discussions of narratives is that it is really about communication of the stories you develop, depending on whom you develop them for.</p> <p>Presentation of the EEW4 survey (Megan Gignac, OÖ Energiesparverband)</p> <p>The study, which was based on interviews with over 1200 experts across Europe, shows that there is a disappointing level of improvement across policy field.</p> <p>Progress is too slow and there is fluctuating implementation, often due to changing governments. There are some member states where the policy ambition is maintained, despite political changes.</p> <p>This seem to happen where there has been a political consensus on the “why” behind energy transition. We want to investigate how these countries achieve this consensus, and the narratives behind this cross-party acceptance. How do we convince stakeholder to implement policies according to the directives?</p> <p>Energy efficiency in relation to narratives that are in people’s minds. Different people react to different arguments. The survey results show that what arguments are viewed as most important (jobs, industrial competitiveness), which stakeholders influence the public debate, and conclude with suggestions for how our community could build a better “Why” behind the drive for energy efficiency.</p> <p>Industrial/business case studies (Daniel Becker, Guidehouse)</p> <p>Background: The speed of implementation of energy efficiency measures</p>

depends on the willingness of policy makers. We have to find out; why is this in the national interest.

10 preliminary case studies, which are still being cross checked/tested, for plausibility, additions etc. Not one workshop per country, but shared with stakeholders in more than one country.

Case study 1, wanting to be a front runner. The thought that EE is of international interest. Example from Denmark, where there is a long-term cross-party consensus for energy efficiency, with arguments such as; it increases our international position if we are independent, and producers of our own energy. There is a certain pride in some industry branches that are in the forefront, ex EVs in Poland

Case study 2, EE as integral optimization: the optimization of the full cycle; saving material, time, making better quality, cost related improvements of the productions cycle.

Case study 3, only talk about real business case for EE. Businesses are critical to the usual co-benefit concept. "When we are trying to sell a product or service, we have to talk about the business case". If the policy framework is too weak and does not allow for or contribute to a strong business case, then it will remain bad even if we stress co-benefits. All sorts of benefits are for a segment of the market. Perceptions from industry. Arguments of co-benefits doesn't help weak business cases over the threshold. We would rather talk business case with a client and say, this is something that pays off. If there is a marketing argument that we can use, we will characterize it marketing

Case study 4, Transparent foundations of EE achievements. We must be sure of what is true. Which data are coming from which source? Prevention of fake news.

Case study 5, Understand your clients, work with the image of technologies. Not only a question about the price, but also if the products are well connotated and if people are motivated to install them (no need for subsidies in that case).

Case 6, Just transition. (Where) is compensation really needed? Is it unjust if no compensation? Is it justified for everyone? Does everyone ask for compensation?

Case 7, Communication is key – the role of stakeholder dialogues. Political and administrative side, need for upfront communication when a measure is planned, shaped and implemented. The stakeholders perceived that there is a lack from the political side, strongly call for a good match and communication with business stakeholders

Case 8, Research and innovation. If the research landscape does not promote EE sufficiently, the image is weak and people from research fields foster rather old school tech and don't highlight the potential of the energy transition.

Case 9, The right pace for workforce qualification.

Case 10, Who is price sensitive and how to discuss cost distribution. Who

need to be compensated and which arguments are used in this context?

Question: Was compliance of directives, regulations etc. ever mentioned as a reason? Daniel: not as prominent as to make a basis of a case study but comprised in some stories.

Level setting – insights from EuroACE on motivating new players to join the energy transition (Adrian Joyce, EuroACE)

Being the front runner is important for building owners, something they put in the forefront in their communications. “We walk the talk”

Narratives are already an important topic

We have struggled to motivate politicians and policy makers to take actions and take notice. There is also resistance among building owners to have obligations on energy efficiency measures.

Industry campaign to raise awareness to policy makers and a way of communication modified to please the audience

You have to be very agile and flexible to adjust (in addition to narratives) the visuals to illustrate the narratives, provide a really good and appealing picture, to get the message out more. If you have an appealing image or picture, you get the message out stronger.

Knowing your audience and getting their attention of interest is really important.

Event evaluation

Useful internal seminar with invited experts with the aim to clear out differences in the meaning of multiple benefits, in order to streamline the language and define real progress and not just green washing. We managed to clarify that multiple benefits has a concrete value and the Multiple Benefits project (<https://www.mbenefits.eu>) provides a systematic methodology to investigate whether it matches with the real business case.

Objective & main programme point

Present EEW4 expert survey findings and industrial case study
Generate input and feedback to inform the industrial narrative(s)
Inform the agenda for the planned in-person seminar in November

Input Collection

EuroACE: Is there a difference between big and small companies in terms of motivation?

Guidehouse: Large industry usually have established their own training programmes for new employees. The building industry, where often much

smaller value chains apply, it is more of a challenge, and going more slowly.

Smaller companies can be more affected if their business sector, while larger companies can balance this out by their portfolio. In none of the workshop there was a final disagreement.

Borg&Co: Will there be clustering and mapping of the case studies?

Guidehouse: When the analysis is finalized, we will come up with recommendations, where there will be a sort of clustering/group formation of the case studies.

It is necessary to see that the benefits are perceived differently and that it has to be distributed differently at different levels.

ESV: In terms of energy efficiency, you have to look at the whole picture within decarbonization. In some Member States, voluntary agreements have a mayor role to play. If you have a policy instrument, you have stability. It is a momentum to keep EE under the radar.

Guidehouse: SMEs have not, even while understanding, the management time to implement. There is a lack of capacity (time) for energy management This applies to case number 2: It makes a huge difference if the result is stamped paper or where people really want to implement.

Borg & Co: The Multiple Benefits project provides a systematic methodology to investigate whether it matches with the real business case. This is a mean to avoid the notion of greenwashing, in terms of “doing not only talking”. There is usually only talk about real business when applying the methodology.

Guidehouse: Important to be precise when talking benefits: Is there anything reinforcing the business case? Is it a marketing argument or does it not apply?

Criticism from industry: Unwillingness from policy makers to change fundamental market structures, for example energy price structures, which led to stagnation of many promising business cases. “Let’s not be distracted by the talk of co-benefits from the correlation between setting the right market condition and thus develop and reinforce the right business model” (strong message in the case studies).

Resources for the EEW4 group: Multiple Benefits case studies, showing different angles. EEFIG, Industry 5.0 may provide example narratives

Borg & Co: Decarbonisation as an infrastructure: How do we treat these infrastructure long-term investments that require long term thinking/investments and backing from national governments?

Guidehouse: the analyses will also take into account the whole framework, not only energy efficiency/

Task 4.4: Testing of narratives with focus group

As described under D3.7, the original concept of the focus group had to be altered due to the impact of the pandemic to a remote format, which then took place via phone calls with individual experts and consultations embedded in other online events.

In this process of consultations, the cases were slightly further refined, for some, titles were altered to make them more expressive. In particular, the following considerations on selected case studies were taken into consideration:

- The aspect of ‘jumping too short’ with the sole energy saving narrative (suggesting that all energy users are similarly keen on saving units of energy) was discussed intensely and the need for stressing more the overall economic optimization effect was clearly articulated
- The suggestive element in the slogan ‘just transition’ was underlined to be potentially misleading / counterproductive, articulating the need for a better narrative on the balance between chances and risks and assumptions on potential winners and losers of the transition (Avoid a ‘race for compensation’ if everyone declaring himself a ‘loser of the transition’)
- The argument, that research and development institutions have a key role as ‘agents of change’ and promoters of a positive connotation of transition and favourably recognized innovation was strengthened
- The role of civil society involvement for creating acceptance for energy efficiency policies was highlighted in the case on participation and communication
- In the case on the image of technologies, the aspect of the desire of end consumers (e.g. homeowners) for modernity and comfortable living by an effective and efficient heating system / insulation standard) was underlined
- Regarding the case of transparent data bases, the hint to Eurostat as publicly available and trustworthy general data source was made, refining it by the aspects that always clear reference on the provenience of data (e.g. indicating if they stem from Eurostat) is essential but not always given, and further analysis based on such data similarly needs to follow clear, scientific and transparent methodologies
- With respect to compensation schemes under e.g. a CO2-tax, the importance of an accompanying communication strategy from the beginning of the process was highlighted, referencing a.o. to the following experience: [Limited impacts of carbon tax rebate programmes on public support for carbon pricing | Nature Climate Change](#)
- It was critically stated that throughout the project, all involved stakeholders had not ranked aspects of energy security very high (as clearly visible in the survey), despite explicitly being asked also in the stakeholder workshops.

Finally, the order of cases was changed according to a cluster structure, and, following the actual geopolitical developments, a remark on the impact/interdependence of the Ukraine crisis was added:

Narrative cases

Cluster Participation and Transparency

Case 1: Communication, Dialogue and Participation

Case 2: Independent and transparent data base

Cluster Economic Aspects

Case 3: Only talk about the real business case for energy efficiency

Case 4: The image of technologies

Cluster Connotation of Change

Case 5: Good to be a front-runner

Case 6: Energy Efficiency as integral improvement of the production cycle

Case 7: Empowering Research and Innovation for Energy Efficiency

Case 8: Education, training and upskilling

Cluster Societal Acceptance

Case 9: Communicate on price effects and social compensation

Case 10: Just transition

Overview on the Clusters

Participation and Transparency

This comprises on the one hand transparency of data on which policies are grounded, from which their targets and functioning principles are derived, and how their effectiveness and positive impact (not only regarding target achievement but also on other relevant parameters like contribution to economic welfare) can be measured and explained. On the other hand it calls for dialogue and participation formats for all relevant stakeholders and stakeholder groups which need to be reached for ensuring the success of these policies, through their understanding, buy-in or at least for managing expectations.

Economic Aspects

Policies need to ensure more than so far that business cases can evolve, which do not remain in market niches but become mainstream through amplification and cost degression. Communication needs to focus not only on the (energy and thus cost-) saving aspect of energy efficiency measures, but stress more the overarching potential for optimizing production processes (and thus also reduce resource input and, more importantly, optimize financial performance). Beyond the area of energy policy, also the role of education, training and upskilling needs to be understood as key factor for economic success, which should be addressed in cross sectoral (e.g. energy AND education) policy packages.

Overview on the Clusters (2)

Connotation of Change

Phases of economic and technological changes in industrial societies typically come along with scepticism and fear (whether to be on the winning or losing side of change), which can significantly delay or even obstruct political reforms. Therefore, for the success of the energy transition as part of the overall decarbonization of the economy, it is required to generate on macro level a positive connotation of change, showcasing economic chances and making transparent the balance of expected gains and losses. On a more detailed level, preferences and needs of end consumers regarding their willingness to adopt new technologies need to be analyzed, to find a reasonable balance between actually required financial support and their potential replacement by image factors of technologies and economic behaviour.

The role of technological research and innovation as an agent and promotor of change in society needs to be fully understood. Also here, it is recommended to establish comprehensive policy packages (e.g. energy AND research policies) beyond the boundaries of traditional policy areas.

Societal Acceptance

Target groups need to be analyzed for their respective vulnerabilities and strengths, in order to find out where financial compensations for acceptance are really required and where not, thus avoiding a fatal 'race for the highest compensation'. This comes along with a thoroughly prepared expectation management on the meaning and impact of a 'just' transition. Where change is to be triggered by price effects, e.g. through a CO₂-tax, particular focus must be laid on communicating the *related* price increase and the level of compensation depending on the social status.

Preamble on implications of Ukraine crisis

- Ukraine crisis shows: potential of EE for energy security high but not taken serious
- In the expert survey, energy security has been ranked low
- Same in the stakeholder workshops: belief in market forces outweighed specific energy security measures
- Recognition dominated by supply side (,this is the real stuff')
- EE seen as the ,little sister'
- Gas dependence so high due to lack of strategic planning for supply
- Also under market conditions unreasonable (too low diversification)
- If now strategic planning is taken up, EE must get an appropriate role

Task 4.5: Finalize 10 case studies

Deliverables:

- **D 4.4 Compilation of final case studies**
- **D 4.5 10 Final Case Studies - individual attractive e-documents**

Case study 01: Communication, Dialogue and Participation

Narrative summary

The effectiveness and added value of policies and measures – in the field of energy efficiency and beyond – can be enhanced significantly when these are grounded on meaningful communication with and involvement of stakeholders and society. In essence, this view builds on the recognition that policy frameworks as well as individual policy instruments deliver better results if those affected by them are given the opportunity to feed their views and expertise into the adoption and implementation process, e.g. by means of consultation processes, parliamentary hearings, moderated stakeholder dialogues, engagement processes for citizens, etc.

Key for success is acceptance among their envisaged target groups. Already when a policy is under preparation, decision makers should consider hearing the positions of relevant stakeholder groups, gain trust among consumers by thoroughly explaining the aims and effects of the planned measures, opening spaces for participation and options to become shareholders (e.g. prosumer models).

The expected benefits of administrations actively engaging with stakeholders and society on legislative and other initiatives comprise an improved understanding of the measures at hand among the constituency, in most cases coming along with a broader level of acceptance. Even if controversial decisions are due, societal actors involved will likely be more inclined to accept them when having sufficient insight into the complexity and rationale of differing views. For policymakers and the administration, on the other hand, consultation and engagement processes can provide valuable information as to who in relevant stakeholder communities has which interest and takes which position, e.g. who is in favour (and under which conditions), who

against (and why in particular), who might become an ally, who might be won over, who is indifferent, etc. Crucially, these are all important pieces of information for devising robust and well-functioning implementation processes.

Meaningful consultation and engagement processes thus provide an opening for stimulating buy-in and acceptance, as well as important opportunities for building and popularising inclusive narratives to support the policy measure at hand, while also having the potential to inform and enhance the quality of policymaking as such.

In the preparatory process for a policy instrument, it is essential to find a good balance between firm decision making on targets and functionality of an instrument and hearing and involving key stakeholders on whom the practical implementation of the policy will depend. In comprehensive transformation processes like the energy transition, initial positions between policy makers and stakeholders are likely to diverge. The aim of the dialogue should not necessarily be full consent of all involved parties, but understanding each other's position and thus setting the horizon helps all sides to get prepared for the envisaged change. If stakeholders are given the chance to make constructive suggestions, their buy-in at a later stage and active contribution to successful implementation of the referred becomes likelier, e.g. when developing business cases, taking investment decisions, fostering training an education etc. Formats by which stakeholder involvement can be supported are e.g. Parliamentary hearings and iterative dialogue platforms on impact monitoring and evaluation. Particular emphasis must be laid on transparency of the procedure towards the public, the selection of stakeholders and the roles in which they act.

Towards the citizens on whom, e.g. as end consumers, policies have an impact, it is advised to create maximum transparency at an early stage about aims and measures and similarly create a positive understanding and buy in. It is beneficial to explore and analyse the target group (e.g. in the case of subsidy schemes) regarding specific preferences and potential concerns and create platforms for participation. Where applicable, projects and business models should provide room also for economic benefits (not only as compensation for negative impacts) and entrepreneurial participation (e.g. prosumer models). The citizen involvement process should be flanked through comprehensive and transparent communication into the broader public.

Examples from the stakeholder input

Arguments and storylines underlining the relevance of substantial communication and dialogue between the policymaking and administration and stakeholder spheres featured prominently in the input the EEW4 project collected from stakeholders across several Member States. At the workshops held for Cyprus and Slovenia, for instance, business representatives identified deficits in the involvement of and communication with stakeholders and the broader public by policymakers and the administration. Both referred to inadequate levels and formats or platforms for structured communication. As an example, stakeholders criticised a lack of timely information on new legislation and missing opportunities to provide input before adoption or implementation, respectively. Considerations for the impacts on and needs of business models, consumers, and market potentials would therefore not be sufficiently reflected in policy decisions. Correspondingly, the absence of established communication channels would often prevent feedback e.g. regarding required policy reforms from effectively reaching policymakers or administrators.

As a result, e.g. Cypriote business stakeholders noted a mismatch between policy instruments with available market potentials and consumer needs, leading to non-action or sub-optimal outcomes. Policy measures would accordingly often lack an effective design that would make it easy for target groups to understand and work with those instruments. Even worse, policy or administrative interventions were predominantly perceived as taking the form of 'hard' enforcement such as fees and sanctions, therefore antagonising regulated subjects and fuelling negative narratives against the policy at hand. In Slovenia, too, business stakeholders emphasised the need to make consultation or dialogue formats an integral part of the policy

process, notably on the level of local authorities. In this view, dialogue formats could be used to enhance trust between decision-makers and stakeholders, as well as between businesses and energy service providers.

As a more general obstacle, the structure of local administration was mentioned. For instance, Cypriote stakeholders identified the fragmentation of local authority with about 350 municipalities, pursuing different approaches and a general lack of communication and coordination among them as a significant obstacle.

In the testing phase, the key importance of both citizen involvement and stakeholder dialogue were unanimously confirmed. The positive role of adequate and timely citizen engagement was highlighted e.g. for the case of Amsterdam, where the city's authorities planned and implemented the installation of charging points for electric vehicles together with the inhabitants of the respective quarters.

Furthermore, it was stressed that stakeholder dialogues were broadly aimed at as an overarching element in new EU legislation same as in that of several member states, e.g. on typically controversial topics like infrastructure planning. It was recommended to consequently expand these activities and intertwine them with the energy transition, not only applying them in case of assumed conflicts but also to proactively create upfront buy-in from citizens. The aspect of participation in the sense of becoming shareholder (e.g. prosumer models, energy communities etc.) was added to further strengthen ownership among citizens, e.g. propagated by stakeholders from the Slovenian workshop. Also here, not only compensation for disadvantages but forward looking shareholdership should be fostered.

Functioning principle and rationale

Arguments advocating for structured and meaningful involvement of stakeholders in the policymaking process of course speak to broader system-level and institutional issues and the way the policy process is organised in particular. As such, they link to broader themes of legitimacy, participation and institutional representation of democracy. Yet as evidenced by the stakeholder input received, involving stakeholders and society become even more important when it comes to implementing transformative frameworks and instruments aimed at accelerating pathways to climate neutrality, energy efficiency being a key element thereof. Generating understanding, broadening acceptance, and creating opportunities for buy-in seem even more important in the light of real or perceived uncertainties and fears of loss related to transformational challenges.

Potential for active engagement and developing enabling narratives in the sense outlined above may be seen in new 'energy citizens' who actively engage in the energy transition and want to control their energy supply, e.g. through energy communities, as Slovenian stakeholders pointed out. Digitalisation and decentralisation of the energy system are regarded as key trends with a potential to activate and empower an active role of consumer/ prosumers and stakeholders not just with regards to the energy system but also for the policy process. The related hopes are that these new actors can play a key role in advancing enabling narratives for energy efficiency and the carbon-neutral transformation as a whole, and effectively engage and demand meaningful and trusted communication with the administration and decision-makers.

Policy implications

When comparing the situation in various EU-member states, it becomes evident that participatory elements such as parliamentary hearings or other forms of stakeholder engagement are often only rudimentarily developed, leading to deficits in communication and leaving potentials for developing enabling narratives untapped. In these contexts, such elements should therefore be made part of policy packages for implementation of policy instruments or introduced even more systematically across policy fields. Importantly, introducing

or strengthening formats for communication and dialogue should not be misinterpreted as weakening the executive, nor should they be confused with allegations of taking decisions without proper democratic legitimation. Rather, they should be seen and handled as thoroughly moderated additional advice for complex and comprehensive policy processes with the aim of maximising policies' effectiveness and impact, thereby also enhancing the public's trust in the administration. Particularly in contexts where regulated subjects may feel alienated by a perceived overemphasis on enforcement and sanctions, offering a dialogue to those concerned may be instrumental to stimulate more inclusive, enabling, forward-looking and collaborative approaches. Strengthening effective communication and dialogue with citizens can also be leveraged to better promote the uptake of energy efficiency measures on consumer and household levels. Prosumer models and other forms of economic participation can also help building bridges for mobilizing private investment.

Several of the recommendations to enhance communication and dialogue with stakeholders and citizens that the EEW4 project received from stakeholders focus on the local level in particular. In this regard, the development and implementation of local energy and climate plans can be an excellent vehicle for authorities to engage and consult with stakeholders and citizens to stimulate buy-in and to set the strategy on a broader footing. As political commitment and backing are key for the success of these plans, grounding them on robust alliances with stakeholders can be a strong enabler, particularly in light of the medium to long-term perspective of these strategies.

Context and transferability

EU context

European institutions put a strong emphasis on transparency and broad stakeholder and citizen consultation and involvement for the policymaking at EU-level. Encompassing consultation processes are well established as part of the better regulation framework and required for all major legislative action. Moreover, the European Commission as the *de jure* agenda-setter goes to great lengths to announce and develop reforms in a transparent fashion often first in non-legislative acts such as communications, green or white papers to stimulate the debate and receive input before drafting actual legislative proposals.

How national policy processes are structured in this regard is of course the remit of Member States. Yet, with the EU's 2030 climate and energy framework and the governance regulation of the Energy Union, the EU introduced requirements for the consultation of governments' National Energy and Climate Plans containing their national targets and measures to achieve them.

While this is just one example, the broader trend towards integrated, bottom-up governance schemes such as the one of the Energy Union might provide further impetus from the EU to strengthen consultation, communication, and dialogue processes and formats also at national level. Stakeholders contributing to the EEW4 project, e.g. in Cyprus, stated that EU policies are perceived as a driver of change at national level, however at times with a focus on obligations and requirements, hence wishing greater emphasis on opportunities and benefits in the way these are communicated. From this view, more communication between the EU and sub-national levels and according initiatives should also be encouraged. Also, a stronger impulse for prosumer models, energy communities and other forms of economic participation should be fostered more actively.

Transferability across Member States

While the foundations are laid and citizen and stakeholder engagement can generally be expected to become more common over time, the actual degree of this being practiced in the various member states varies considerably. Decision-makers' capacity for meaningful engagement also hinges on the administrative structure of a given jurisdiction. Structure and allocation of competencies across the different levels of governance heavily impact the

conditions for establishing or expanding of dialogue and communication formats in the above sense, going together with the broader administrative culture and historically grown understanding and practice of how state power is exercised and communicated, e.g. across the spectrum of centralised, top-down versus decentralised and open for bottom-up input. Lastly, meaningful involvement of stakeholders in the policy process is also conditioned on the perceived legitimacy of civil society as representing the entire spectrum of interests, e.g. not being restricted to or captured by a few vested interests. Putting aside those differences, it is encouraging to see good practice examples for successful engagement of both civil society and relevant stakeholders in a constructive manner, subsequently leading to a differentiated and often positive view on the transition – and accordingly supportive narratives. It is worthwhile highlighting and sharing good practice for mutual learning.

Case study 02: Independent and transparent data

Narrative summary

Key for acceptance of energy efficiency and new energy technologies is the availability of independently generated data, transparency on its sources and the way they are processed and used. This allows the public to better understand the technological and economic potential, both regarding a cost-benefit comparison and on macroeconomic level. Performance of projects, e.g. successful and cost efficient energy saving, becomes visible, the degree of market deployment can be illustrated in combination with further policy measures and its underlying reasoning. Traditional energy statistics typically do not pay attention to the specifics of energy efficiency and renewable energies, lacking granularity and not delivering tailored data sets to measure e.g. the competitive progress against conventional energy technologies. Thus, this can lead to the impression that new energy technologies were not a good choice compared to the established.

If data are not available in the required quality, the risk occurs that stakeholders either use own, not independently verified data in order to illustrate their view on the energy transition and thus influence the debate. Misleading selections of figures (e.g. cost-benefit relations), wrong contextualization and in some cases even fake facts can create a hostile climate for change. Lack of transparency on the data sources makes it hard for the public to form their own opinion even if not per se opposed to the energy transition.

Therefore, when policy instruments are implemented, attention should be paid to attaching to them a robust and independently verified process of data gathering for monitoring of the target achievement of that policy and its degree of success, to be used for evaluation and regular adjustment. These data can also in a broader sense serve as a source of reference, gradually aggregating over time and allowing to give the public an insight into progress of policies, market deployment and successful projects. It will also help correcting erroneous or false statements (e.g. non contextualized statements on extreme cost of change) and in the public opinion increase acceptance and trust in the transition processes.

Case

Introduction and evidence

Business stakeholder workshops in Poland, Ireland and France as well as the Parliamentary workshop in Ireland revealed that a lack of transparency often undermines the credibility and acceptance of energy efficiency measures and hinders the development of new business models.

Public perception of the economic impacts of energy efficiency is often determined by simplistic, randomly selected or even false data foundations. Typically, short term payback considerations outweigh the mid to longer term perspective. In many contexts the factual base of narratives

remains intransparent due to lack of independent guidance.

Positive features of energy efficiency are less evident compared to e.g. benefits of renewable energy generation, as actual savings in combination with further economic benefits (e.g. integral improvement of the production cycle) are more difficult to quantify and compare with a 'no measures' scenario. Where clear and transparent reference data are lacking, counter narratives based on randomly picked figures and statements (e.g. claiming a bad cost-benefit relation of energy efficiency) can lead to a negative image of energy efficiency.

Improving transparency around the impacts of energy efficiency policies and investments is a prerequisite to enable the broader energy efficiency narrative and is required to improve the acceptance and popularity of specific energy efficiency measures. Moreover, improved transparency is required to enable new business models. Showing energy efficiency impacts needs to be based on a proper definition of baselines, adequate monitoring of impacts and access to the generated information. In addition, such information needs to be properly contextualized to be comprehensible for the target audiences.

Functioning principle and rationale

Creating fact-based communication around energy efficiency

Since the impacts of energy efficiency measures are not always directly visible, they are easily subject to uncertainty and even speculation. Uncertainty emerges over the actual impacts (energy savings, higher energy productivity, etc.) which in turn makes energy efficiency investments appear risky on a business level. Also, the public perception of energy efficiency programs is heavily impacted by a lack of transparency: spending public money on energy efficiency programs hardly gains support, if the impacts are not clearly known and communicated. Moreover, a lack of clarity on energy efficiency impacts creates ground for speculation around the proper use of public funds and the overall aim of energy transition measures. In the worst case, this can feed into broader opposition narratives against energy transition aims.

Against this background, creating the right framework for a fact-based discourse and narratives on energy efficiency measures is crucial. Only when policy and project impacts are properly monitored (based on transparent data with an adequate methodological background) and the results made accessible to adequate target groups, trust in such measures can be (re-)gained.

Creating solutions to improve transparency

There is a range of elements required to improve transparency around energy efficiency measures and thus to improve the framing of the public discourse in that respect.

- **Reliability:** impacts need to be assessed and communicated based on defined quality standards and clear rules. There must be processes in place that credibly enforce the proper definition and implementation of such rules (e.g. for energy audits).
- **Independence:** Data and the assessment of impacts need to be perceived as (and be in substance) impartial to improve their credibility. Evident principle-agent issues (where the project assessment is financed by the firm making the investment) must be avoided where possible.
- **Data availability:** making real-time data available (e.g. by means of smart metering) is seen as a necessary step towards improved transparency. In this context and for the purpose of public acceptance, it is important to properly address data security and protection issues. Otherwise the attempt to improve transparency may be perceived as a means to datamining.
- **Communication:** Once facts on the impacts of projects and measures are established, their proper communication is crucial. Results need to be presented in a manner tailored to target groups and be easily accessible and, as much as possible, verifiable.

A comprehensive view on energy efficiency impacts (link to real business case and EE and integral improvement of the production cycle)

Another topic discussed in the workshops is broadening the view on energy efficiency impacts. This aspect relates to several other identified narratives, such as case 3 (real business case) and case 1 on (integral improvement of the production cycle). Improved transparency on energy efficiency measures means to communicate very clearly in the economic and non-economic impacts. Economic impacts should include additional aspects beyond energy use, return of investments and payback times, such as value increases through energy efficiency investments in buildings. However, these need to be clearly monetized to be included in the economic business case. Other non-monetizable impacts may also be referred to, but should be clearly distinguished from the core economic impacts of investments. Having a broader view on energy efficiency impacts while clearly differentiating between economic and non-economic benefits is key to improve transparency.

New business models

Given the numerous technical energy efficiency solutions, the scattered nature of their application and the - sometimes challenging - business case (e.g. long payback periods), new business models can play a crucial role in the rollout of energy efficiency solutions. Apart from creating trust in and public acceptance for energy efficiency measures, improving transparency is also paramount to enabling new business models. New business models are dependent on the reliability, independence and availability of data and impact assessments. This is the case as the profitability of new business models depends on the visibility of the economic impacts. Moreover, end consumers need to be able to see and react to their energy-relevant behaviour, which in turn can then unfold an economic impact on them. Being economically impacted by energy-related behaviour is key to creating a framework in which new business models can emerge.

Once transparency is improved, tailored client advice based on measuring energy consumption can be provided.

Policy implications

The most obvious policy implication of this case study is to ensure that the narrative on the benefits and achievements of energy efficiency is backed by clear and transparent reference data and a subsequent solid argumentation. Attention is required to the availability and accessibility of according data and appropriate methodologies which sufficiently contextualize achievements in energy efficiency (e.g. not only considering – in an isolated manner per measure - the payback period in comparison versus a business-as-usual scenario, but add further quantitative economic data such as future price developments, contribution to technological transformation etc.). These methodologies need to be fully transparent, in order to build robust argumentation on them and allow to unveil random, misleading or even fake information.

In most country specific contexts and on EU level, data to serve as a transparent foundation already exist, but more effort is needed to select and further standardize across and within EU Member States to ensure their comparability.

A key element to improve transparency is supporting the organizational and institutional capabilities in Member States, i.e. enabling them to collect and verify data and make them accessible. In addition, strengthening the institutional capacities in Member States should aim at enhancing their communication capabilities: national and local institutions need to be able to properly interpret and contextualize the available data to support credible and reliable narratives. This also may involve procedural aspects of data and report verification, potentially with the involvement of EU-level organisations.

An effective way of data gathering is incorporating it in the setup of new policy instruments, e.g. by an accompanying monitoring and evaluation process run by an independent, qualified institution.

Context and transferability

EU context

The EU Green deal and the subsequent Fitfor55 package proposed by the EC imply a significant increase in ambition level of climate and energy policies in Europe. This broad push evidently also includes energy efficiency and may provide the context for strengthened energy efficiency narratives on national and local level. However, a major acceptance risk arises if the credibility of energy efficiency policies and measures is not ensured. The European energy sector has good foundations for further strengthening its transparency, but data quality and availability differs between the EU Member States.

Transferability across Member States

Improving transparency around energy efficiency policies and measures will generally resonate across all Member States. However, the specific state of data availability and accessibility as well as the proper communication of such data differs between the EU Member States and depends on national statistics and related market and policy conditions. In addition, data collection and use are accepted to different extent. In some Member States, there is pronounced scepticism towards the collection and use of data, with possible negative impacts on improving transparency. In other Member States there may be less public hesitance against using data, but the institutional foundations may be less established and robust. I.e. trust in public institutions and organisations and their published data varies greatly among EU Member States. Thus, improving transparency will have to tackle these specific circumstances in each case and establish an awareness for the relevance of this supportive aspect to policies.

Case study 03: 'Only talk about the real business case for energy efficiency'

Narrative summary

When the first policy instruments for energy efficiency were created, it was expected that business cases would gradually develop and become stronger when demand was increasing. What in fact was the case for renewable energy upscaling often remained very scattered in the more complex field of energy efficiency. Here, the amount of viable business cases is not only a function of cost degression of technical solutions but requires a comprehensive level playing field in relation to both competing solutions, energy prices, counter-productive subsidies etc., which have often not been addressed to the degree needed. Thus, many energy efficiency business cases remained niche solutions. To broaden their range, a positive narrative is built around non-economic 'co-benefits' (assuming that customers may want to e.g. contribute to cleaner air). However, this well-meant, often altruism-based narrative may reach the opposite: it frequently contributes to the counter-productive impression of just putting gloss on a per se non-convincing business case (here, a link can be made to the case study on independent and transparent data).

Various EEW workshops have shown that comprehensive business cases must be developed and presented. While this includes accounting for business impacts beyond direct energy costs, these additional impacts need to be incorporated into the economic business case. Added value to the client may include convenience, process modernization, or upgrading a firm brand. This added value should be monetized as much as possible to achieve a comprehensive view on the

business case. Any other, non-monetizable, benefits may be referred to, but should be presented as separate from the economic business case.

Focusing on the “real business case” helps to further strengthen an honest, transparent and credible narrative about what the business case is - and what it is not. It similarly adds clarity where political steering is needed for levelling the playing field.

Case

Introduction and evidence

Business stakeholder workshops in Ireland, France, Cyprus, Italy and Germany all alluded to the impression that the way business cases of energy efficiency investments are built and communicated has often been flawed – sometimes being overly optimistic, often incomplete and most of the time not driven by hard economic facts. Insufficient ambition levels in policy making were often leading to situations where business cases would not make it out of their initial market niche (e.g. performance contracting). Instead of creating a level playing field allowing for expansion of innovative approaches and broad market deployment, in the view of the stakeholders often counter-productive campaigns were run: “add some marketing on its greenness and the niche solution will sell although not really competitive”.

Professionalizing the way business cases are assessed and communicated is, according to the workshop participants, required to enable an economy-driven rollout of energy efficiency measures.

Functioning principle and rationale

Co-benefits to polish up poor business cases

In the various workshops, participants expressed the notion that energy efficiency investments are being sold by relating them to a range of economic and non-economic benefits. However, these are often mingled together and aspects like savings in energy cost are presented next to the overall “greenness” of an investment. This way of presenting the case for energy efficiency attempts to add a range of arguments to the decision making, which effectively touches upon very different types of benefits and relevant considerations. Instead of supporting an objective decision on an investment, this narrative approach tends to cloud the core economic issue at hand. This lack of transparency in presenting the case for energy efficiency is perceived as an attempt to cover-up for the potentially poor performance of energy efficiency business cases.

The real business case

In contrast to compiling and presenting (alleged) business cases in an undifferentiated and imprecise manner, a transparent assessment and presentation is required.

The real business case includes, firstly, not to present only energy and emission savings as such, but the economic/business impact thereof. In addition, business impacts beyond direct energy costs should be included in the analysis. This added value should be monetized as much as possible to achieve a comprehensive view on the business case. These may include convenience, process modernization, upgrading a firm brand or increasing the value of a property or house. In addition, the real business case requires transparency around the payback times of investments. To polish up energy efficiency offers, sometimes unrealistic assumptions are made, while the value add effectively unfolds over a longer period.

Any other, non-monetizable, benefits may be referred to, but should be presented as separate from the core economic business case. The real business case may indeed include a whole package, including key economic impacts and co-benefits. But a very clear and transparent presentation of the economic added value for the client is always required. In this context, general “green features” of an investment may be used for marketing purposes but being transparent that it is marketing and not the core economic reason to buy, is paramount.

The other non-economic benefits related to energy efficiency may in the end even be the key driver for an investment decision, such as in the case of improved convenience resulting from energy efficiency measures in buildings (e.g. better heating and indoor climate). However, when

selling “convenience” (rather than “avoided energy use”) it is equally important to make this aspect the core of the service/product.

In sum, the real business case is about distinguishing clearly between the different types of impacts of an energy efficiency investment and the potential key selling points, instead of simply adding very different arguments in favour of energy efficiency while losing sight of the core economic impacts.

Policy implications

Promoting energy efficiency business cases should be convincing by their economic performance. Where this is not or only marginally given due to insufficient policy framework, the focus must be laid on further levelling the playing field and thus broadening the viability of more ‘real’ business cases not reliant on non-economic ‘co-benefits’.

Various concrete policy implications can be derived from there: Firstly, the Commission may consider publishing and updating guidelines for assessing the business case for Energy Efficiency investments - beyond the “multiple benefits” approach and focusing on the core business case. In addition, further standard setting in energy audits and energy consultancy could be considered. This relates to the need to further develop the adequate skills and qualifications to properly assess energy efficiency business cases (also see the separate case study on “skills and qualifications”).

Apart from the policy implication itself, also the presentation of energy efficiency policies and their impacts (on the economy as a whole and on businesses) needs to be sharpened, i.e. clearly distinguishing core business impacts from broader non-economic side effects of energy efficiency investments.

In addition, transparency standards (data collection, comparability and accessibility) may have to be improved. See for this aspect the separate case study on “independent and transparent data”.

In order to support such “real business cases”, the legal framework needs to allow for business models to emerge and grow:

- Long-term views on market developments, such as energy prices and CO2 prices.
- The right legal framework to create transparency (e.g. via smart metering)
- Market-based instruments rather than straight-forward grants, such as white certificate schemes.
- Long-term security on the development of incentives.
- A framework for education and trainings that allows for the implementation of new business models (in sometimes very traditional business revolving around the housing sector).

Context and transferability

EU context

In the EU context energy efficiency policies undergo regular scrutiny in terms of their overall economic benefits. The recently proposed Fitfor55 package and the subsequent proposals (e.g. on a revision of the EPBD) all undergo a structured Impact Assessment. Being as credible, precise and transparent as possible in these assessments is paramount to creating trust in the economic case for energy efficiency policies.

Europe is seen globally as a frontrunner in climate action, proving that economic growth and sustainability can and should go hand in hand. This means that also on individual business level the business case for energy efficiency needs to be robust. Only such business-related robustness will provide the European approach of combining business with climate change mitigation with the required credibility.

Transferability across Member States

Generally speaking, a robust narrative around the business case for energy efficiency should be easily transferable to all Member States. However, different Member States have different foci on typical business cases. These may be elaborated per member state for different sectors. In the housing sector, the business case for energy efficiency investments will depend on the existing housing structure and the climate and weather context, among others. Likewise, for the commercial and industrial sectors, the typical business cases will depend on the economic activity and industrial production processes will require entirely different approaches than the tourism sector. Thus, while the general call for a professionalized approach towards business cases is universally applicable, its specific application will depend entirely on the respective context. Despite all differences to be considered, the focus of policy making needs to be on an enabling environment, allowing policies to expand and not remain in market niches.

Case study 04: Successfully communicate the shift away from outdated technologies

Narrative summary

Phasing out of inefficient and emission-intensive appliances and technologies is the focus of a significant number of policies and support schemes throughout EU member states. Namely in the field of heating, a high potential of efficiency gains and thus emission reduction can be tapped, e.g. by replacing old electric storage heaters or oil heating systems. Most instruments to promote energy efficient technologies are based on a mix of **regulatory measures** and **financial incentives**. If target achievement is lagging behind, it is often assumed that the level of support was insufficient for levelling the cost difference to efficient technologies. However, examples show that socio-economic analysis of the target groups allows for a more differentiated reading of appropriate instruments needed. Especially the image associated with certain appliances or technologies and the related popular perception can have substantial positive or negative impact on target achievement, independent from or even counter-indicative to the available financial support. With regard to regulatory measures put in place to replace outdated technologies, the image factor can also have a positive impact regarding acceptance and compliance. Tailored communication is key especially for those not responding to financial incentives.

In order to foster a positive image and perception of energy efficient technologies among individuals and households, a targeted, clear, and multi-level communication strategy is essential. Also, socio-economic aspects that affect the decision-making process of the target group need to be considered in devising the communication strategy. Pertinent communication can pursue different strategies:

- One is to focus on the positive impact of new technologies, e.g. by speaking to target groups' interest in enjoying high technological standards and a resulting increase real estate value. Further benefits such story lines can mobilise comprise higher quality of living, lifestyle aspects (being modern, using cutting-edge innovations), enhanced aesthetics of renovated buildings as well as improved safety, reliability and easier maintenance.
- Another strategy is to emphasise negative impacts of outdated technologies (e.g. safety risks, higher costs, higher maintenance), but such strategies should nonetheless also refer to the benefits of alternative available technologies as a remedy.
- In addition, a specific narrative needs to be developed in cases decarbonisation technologies are associated with a prevalent negative image, marked not by lack of market maturity or high costs but rather cultural or historical reasons. In certain Eastern European contexts, for example, a negative image is associated with wood heating as a sign of poverty, scarcity and backwardness.

Against this background, different lines of argument for persuading consumers gain priority over energy or emission savings, levelled cost difference etc. These need to be carefully assessed before tailoring a target group focussed communication strategy. New technologies must be appealing beyond cost arguments associated with cost-value relation, safety etc. on the one hand, on the other hand convenience, innovation and modern lifestyle, in order to address different layers of perception.

Cases

A pointed statement during one of the stakeholder workshops named the commonly known dilemma of underperforming support schemes: "Don't throw money at people if they haven't understood why they should want a new heating". Rather the situation of the target group to be addressed should be analysed and understood first, and then a mix of incentives and dedicated

image campaign could deliver much better results.

Upper Austria – Campaign ‘Saying good bye to oil’

After having made only slow progress in oil heating replacement by providing financial support, the region of Upper Austria took a closer look through a survey not only at the building stock but also at the relevant target groups. From the results it turned out that only a minority of house owners struggled with the replacement cost, whilst a much larger share showed high interest in keeping their buildings at high technological standards, also in view of maintaining the value of their property.

Subsequently, the campaign ‘By to Oil’ was implemented, focusing mainly on the negative impact of outdated oil heating systems with respect to value development of real estate, quality of life (e.g. odour), climate and environment, all in combination with a strong image component. The campaign turned out to be much more successful than the previous support policy, whilst those cases in which funding really was key could receive more tailored support. In addition, the campaign follows a multi-level approach including municipalities, associations, schools, local enterprises as supporters and provides specific materials.



Source: <https://www.xn--adiueul-0xa.at/index.php?id=2>

Slovenia – negative image of wood heating

Although Slovenia has abundant wood resources to be used for heating at competitive costs, new or renovated buildings tend to be equipped mainly with modern gas boilers or heat pumps. As Slovenian stakeholders explained, this is due to the negative image associated with wood heating as a sign of poverty and backwardness, rooting in the experience of shortage and lack of modern technologies during the communist era.

Cyprus – create positive image for economically viable technologies

Cypriote business stakeholders stressed that plenty of technologies that were already fully competitive under the local conditions, e.g. solar hot water and heating support, were not used - mainly for the absence of a positive image attached to them (the starting point not being a negative connotation but more indifference to it). They suggested to include people who deployed solar energy systems or implemented building insulation in promotion campaigns as “ambassadors” for their energy efficiency measure to raise awareness of the benefits.

Functioning principle and rationale

In many cases it can be observed that the shift from outdated technologies to new energy efficient technologies progresses very slowly although extensive financial incentives are provided, or regulatory measures being in place. A clear and graduated communication strategy is key, considering the following principles:

- Have a clear picture of the market segments that shall be addressed with the communication strategy and a clear understanding of e.g. their income structures, motivation to invest as well

as attitudes and views based on the socio-economic and cultural analysis. Different channels of (social) marketing can be used and various actors at different levels can be integrated in this approach to act as ambassadors to promote new technologies such as state level and municipalities, schools, companies, sector associations, agencies etc.

- Make it as specific as possible in terms of technology and areas of application and embed it in a broader context. This can be accompanied by forming pictures in the mind that have different hooks than previously used. Where costs are not the key issue, work with emotion, empathy and perspective of success.
- Use key differentiators in communication per market segment or target group when communicating and visualising new or outdated technology and the respective impacts. Reach out to the target groups with the appropriate form of presentation and statements that forms the image which primarily affects the decision-making.

Policy implications

In all policy instruments aiming at replacement of outdated technologies, the level of subsidy or other available funding is ascribed a key role. It should for sure not be too low, but it is a known fact in policy making that there is no linear correlation between subsidy level and the according effect, i.e. the willingness to change on the side of the target group. Too high subsidy levels can, besides economic inefficiency, even negatively affect the reputation of technologies and the programmes to foster them.

Policy makers therefore are recommended to combine target group analysis and subsequent specific communication strategies with selected structures of financial incentives. It must be acknowledged that the image or perception of a technology fundamentally depends on socio-economic and cultural environment of the target group. Therefore, a mix of appropriate instruments is needed, cost arguments are not always the crucial factor to replace an outdated technology. Apart from financial incentives and regulatory measures image campaigns and associated altered perceptions can significantly increase the target achievement to shift away from outdated technologies. When designing those image campaign all relevant socio-economic and cultural aspects need to incorporate to make it successful.

Another key vector is to contextualise the narrative and highlight which technologies can be applied where, which positive or negative trigger points exist, what can be used respective need to be avoided in communication with the specific target groups. In the end, a mix of different policy instruments is needed that complements each other and fit well into the overarching strategy to shift away from outdated technologies.

Context and transferability

EU context

At EU-level, mostly regulatory measures to phase down or out inefficient and outdated technologies are in place, just to mention some of those: The proposal of revised Energy Efficiency Directive contains the article on energy obligation schemes and its related Annex V which, for example, excludes the accountability of energy savings from policy measures regarding the use of direct fossil fuel combustion technologies. The CO₂ regulation of passenger cars and light commercial vehicles sets EU fleet-wide CO₂ emission targets applying from 2020, 2025 and 2030 and includes a mechanism to incentivise the uptake of zero- and low-emission vehicles. Finally, the EU sustainable finance taxonomy regulation will enable investors to re-

orient investments towards more sustainable technologies.

Apart from these regulatory measures, the EU can encourage Member States to develop adapted narrative and targeted communication strategies to support the shift towards new technologies.

Transferability across Member States

As it was discussed in the business stakeholder workshops, the perception of certain technologies, communication patterns and established narratives differ from one Member State to another depending on the socio-economic structure of the target groups, communication behaviour, cultural influences, historical background, etc. In this context, it is for instance important to understand what is viewed and understood as ‘modern’ and what is regarded as ‘outdated’ in each Member State and for each market segment in order to create the most impactful communication strategy. This requires an adapted approach for each Member State but the functioning principles described above can be generally applied.

Case study 05: ‘Good to be a front-runner’

Narrative summary

Perhaps the strongest of all overarching narratives is societal consensus that being a front runner on the energy transition is congruent with national interest. In such case, cost-benefit comparisons of single projects and approaches stand back behind the bigger picture of public welfare and macro economic gain through innovation, being an early adopter of new technologies and thus strategically positioning on new markets. Where this overall consent is reached, policies are much less likely fail or become subject to ideological dispute but will be judged pragmatically on the degree to which they contribute to the overarching modernization target.

While it can be argued that the preconditions for such societal consensus cannot be created by energy policy alone, it can be recognized that also gradual approaches have considerable success. There are examples for single sectors and specific technologies receiving high levels of positive connotation: confidence in their economic potential and thus higher welfare, pride on technological progress and image building quality e.g. for changing regions. Working with these and, by presenting success stories, showing transferability to other sectors and technologies can significantly help to establish a positive narrative for structural change and the according potential of the energy transition (see also case “Just Transition”).

Front-running Member States – the case of Denmark

Denmark is widely perceived to pursue leading energy efficiency and renewable energy policies, as illustrated by Danish policymakers and experts in statements such as: “*Denmark is really a front-runner in energy efficiency. [...] the core narrative consists of the conscience that it is good for us.*”² This perception is confirmed by the results of the surveys carried out by the Energy Efficiency Watch project in recent years, in which energy experts rank Denmark among the top two EU Member States regarding energy efficiency policies (second in the 2020 edition of the EEW survey and first in the 2015 edition).³

As showcased by Denmark, consistency between rhetoric and action over time is a key dimension and enabling factor. Similarly, it is also key to operationalise general principles

² Input received at the EEW4 Danish Parliamentary Workshop, held on 29 May 2020. The full summary is available in the event report at <http://www.energy-efficiency-watch.org/media/pdf/EUFORES-Danish-National-Parliamentary-Workshop.pdf>.

³ Cf. summarised presentation of the EEW4 Survey, available at: <http://www.energy-efficiency-watch.org/media/publications/EEW4-survey-slides.pdf>

established in policy strategies or even regulation to implement them in tangible measures. A case in point is the 'energy efficiency first' principle that is widely acknowledged but one that is being translated into relevant policies rather successively at the time of writing.

To the extent that it sets a benchmark for implementing policy measures, communication around a claimed leadership role could even be leveraged as a starting point to demand accountability by interested stakeholders, as was stated at the Parliamentary Workshop of Energy Efficiency Watch in Italy.⁴ Similar implications can be expected of enshrining ambitious long-term targets for carbon neutrality in Member States' national frameworks which provide a suitable starting point for anchoring narratives aimed at advancing swift decarbonisation. Embedding such target frameworks in a shared narrative is key to stimulate broad support and buy-in for the changes needed from businesses and consumers.

Key factors highlighted by Danish policy makers and stakeholders to underpin this view comprise:

1. Denmark's ambitious, widely consensual targets and policy instruments (e.g. its energy efficiency obligation scheme);
2. Denmark's strong track record in sustainable energy, e.g. demonstrated by the decoupling of economic growth from greenhouse gas emissions and water consumption;
3. the recognition that pursuing ambitious policies for expanding sustainable energy helped to develop key industries with a strong innovation and export potential that created significant employment on all levels;
4. the recognition of synergies between developing energy efficiency and renewable energies, with the latter also covering a large share of the energy supply.

Danish stakeholders also pointed to the historical background of the oil crisis in the 1970s as a starting point for strategic reflexions on how to enhance resilience to such shocks, progressively leading to the paradigm of pioneering the development of renewable energy and energy efficiency technologies. Strong and multifaceted considerations for the resilience of society, e.g. also including aspects of health, social cohesion, competitiveness, environmental protection etc., thus form the bedrock on which the front-running narrative builds.

Business stakeholders also in other workshops, e.g. Poland, Slovenia or Cyprus, highlighted the relevance of narratives and communication strategies underlining the benefits of energy efficiency in terms of innovative business and qualified jobs for individual industrial sectors. Here not individuals or end-users are the recipients of the narrative but the general public. In Poland, for example, electric mobility is very popular and is ascribed a great potential for modern industry, manufacturers and for generating well-qualified jobs. It is perceived as a chance for maintaining and modernizing the traditional car component manufacturing. Thus, leap frogging is here a centrepiece of a positive narrative rather than the threat of old industries. Overall, energy efficiency must be comprehensively embedded in industrial strategies and showcased as a smart combination of innovative technologies (e.g. e-mobility, storage, heat pumps, etc.) that connects with the existing industrial structure and local production.

Functioning principle and rationale

As evidenced by its consistency over time and documented by the input received from the Danish policy community, the perception of Denmark as a frontrunner appears to hold regardless of the respective ruling coalition and changes in government. In fact, the government is perceived as actively striving to maintain Denmark's leading role for promoting sustainable energy.

Relatedly, the Danish energy policy community consistently called for ambitious EU targets for

⁴ Event Report: [EEW4 EVENT REPORTING EUFORES NATIONAL WORKSHOP ITALY.docx](#)

energy efficiency and renewable energies, cross-border collaboration and progress on the EU energy market integration for creating a level playing field. This would benefit Denmark, e.g. for exporting excess renewable energy, sustainable energy technologies and for creating jobs: “*We need to sell our energy and we need an EU renewable energy market; we need to be able to sell jobs and technologies. The EU represents a chance for this.*” Given its capacity to promote sustainable energy (both on the supply and on the demand side), market integration and collaboration, the EU is therefore seen as an important vehicle for leveraging Denmark’s competitive edge in sustainable energy technologies, thereby strengthening employment in leading domestic industries, whilst “*saving the world*” at the same time. Beyond driving business performance, this story therefore also helped stimulate societal acceptance for energy efficiency and the energy transition more broadly.

Aspirations to pursue ambitious energy efficiency policies and to be perceived as front-runner feature an economic rationale at their core, i.e. they strongly link to considerations of competitiveness, trade benefits and employment in the Danish case. This also correlates with the EEW4 survey, according to which industrial competitiveness, employment, and the country’s international image are ranked as the three most important topics in the general public debate in Denmark in the context of energy efficiency.⁵

Policy implications

It is a strong enabling narrative if a country wants to be front-runner on energy efficiency. Therefore, the key question is what is needed to support EU Member States in identifying why, in which area and by which concrete measures they want to become front-runners. Grounding strategies and policies on claims or aspirations for leadership in the public debate bears a significant credibility component. Fundamentally, policy measures need to be in line with the claimed ambition or leading role to ensure consistency between rhetoric and action. The case argues that ambitious and credible targets, prior achievements in implementation, and shining lighthouse projects with demonstrated benefits, also in the broader economic and societal sense, are key vectors to build on the recognition and associated narrative around the theme of ‘it is beneficial to be a front-runner’. In such a context, marketing bold energy efficiency policies with story lines around this theme then significantly facilitates their adoption and effective implementation. Perceptions and narratives of ‘being or becoming a front-runner’ are likely to take time to build. Indicators for their success can inter alia be seen in:

- clear and recognised economic benefits from energy efficiency business cases that may include technological leadership and developing industry sustainability champions;
- broad agreement across society and industry regarding the benefits of bold energy efficiency measures;
- consistency over time of such societal agreement that also translates into a stable political orientation and framework regardless of changes in government;
- government efforts to develop and maintain a leading role in energy efficiency in the sense of a credible advocate at both national and EU level.

To sustain effectiveness, narratives pertaining to ‘being a front-runner’ should not be used to argue against taking further measures needed for the transformation, e.g. along the lines of ‘we are already best’, which could be a potential temptation for certain fractions of the political spectrum. Instead, the narrative should be leveraged to emphasise that efforts to maintain leadership in sustainability are needed to sustain the economic success conditioned on the former.

⁵ Full Survey Report: <http://www.energy-efficiency-watch.org/media/publications/EEW4-survey-report.pdf>

Context and transferability

EU context

The aspiration to lead the fight against climate change and to pioneer the carbon-neutral transformation features prominently in the EU's strategy and communication. Notably in the context of its positioning in international climate negotiations, the EU is sometimes characterised as a (green) normative power, able to leverage its governance architecture in the sense of a multi-level reinforcement.⁶ Domestically, too, the EU conveys the pioneering ambition prominently with the European Green Deal, framed as Europe's "man-on-the-moon moment" to contextualise the mobilisation for achieving carbon neutrality by 2050. As such, the European Green Deal both widened the discursive space and upgraded the strategic policy outlook, creating windows of opportunity for moving transformational narratives and policies ahead, as documented by expert input collected in EEW4.⁷ Even if discourses centring on the pioneering theme might not resonate effectively in all Member States, the EU's efforts to ground the objective of climate neutrality both in legislation as well as in discourse sets the scene and provides a robust overarching reference for connecting narratives enabling ambitious measures in national debates.

Transferability across Member States

In order to resonate effectively with society, enabling narratives need to be adapted to the specific national or regional contexts. Generally, we can expect narratives that speak to considerations for job creation, industrial competitiveness and modernisation or infrastructure investments to resonate effectively in many societies across the EU. In the context of energy efficiency, these are found to be the three most important topics in the general public debate for 27%, 20% and 14% respectively, as found by the over 1,200 energy experts consulted by the EEW4 survey from across all the EU-27.⁸ To the extent that narratives centring on the aspiration for a front-running role effectively incorporate or link to such economic rationales, one could expect them to have a potential for advancing energy efficiency in the public discourse also in other contexts than those elaborated on in more detail above.

Also in ongoing transition processes, the front-runner narrative can serve to over-write fear of loss by pride to be at the forefront of transformation. E.g. former mining areas diversifying their structure not necessarily lose their identity but can transform it into 'new energy region'. Overall, we expect public acceptance for energy efficiency policies to roughly correlate with the (perceived) progress already made. Policymakers can build a perceived aspiration for leadership for energy efficiency and the carbon neutral transformation as a whole in different ways, including through ambitious targets and policies and a corresponding track record, promoting lighthouse technologies and projects and sustainable national industrial champions (potentially also abroad) and also through governments' positioning at EU-level.

Case study 06: Energy efficiency as integral improvement of the production cycle

Narrative summary

Energy efficiency investments are typically assessed against their potential to provide energy cost savings. Investment decision-making in the private sector often focuses on short-term

⁶ Miranda Schreurs, Yves Tiberghien (2007), Multi-Level Reinforcement: Explaining European Union Leadership in Climate Change Mitigation, *Global Environmental Politics* 7(4): 19-46.

⁷ Cf. <http://www.energy-efficiency-watch.org/media/pdf/NAVIGANT-Workshop-Capturing-narratives-in-energy-efficiency.pdf>

⁸ Full Survey Report: <http://www.energy-efficiency-watch.org/media/publications/EEW4-survey-report.pdf>

profitability based on a one-dimensional assessment of payback times, determined by cost of energy and required investment.

Awareness among company leaders and policy makers needs to be raised that energy efficiency investments tend to pay off in the longer term and contribute to a sustained competitive advantage not only through cost reduction but also due to higher process efficiency and improved product and service quality.

Understanding energy efficiency in terms of opportunities for innovation and growth can be achieved when embracing a more holistic view on energy efficiency. This includes state-of-the-art technology options, cutting-edge digital solutions, the potential to improve the production cycle and output quality through well-considered energy efficiency measures. Thus, energy efficiency ought to be understood as an integral improvement of the production cycle instead of a purely energy-focussed issue, e.g. reduction of consumption.

Awareness for the broad business improvement potential and innovative character of energy efficiency measures can be triggered by more supportive audit regulation. This potential for business improvement can only be tapped when companies do not regard audits primarily as a formal obligation to comply with but as providing valuable insights on how to modernize the value creation of a firm. To improve the benefits of audits, they should provide decision makers in businesses and industries with integrated and profound guidance rather than generic recommendations. Supportive energy efficiency audits can create significant added value to ensure international competitiveness of EU companies and industries and making them ready for the future on their path towards decarbonization.

Tapping into this potential from a policy angle requires clearer rules on auditing, when and how to do them, how they can be considered meaningful, which reporting lines to establish, etc. The aim should be to have audit results presented at board level, making them part of the financial KPIs of a company and not just a matter of compliance with environmental regulations. Once this happens, the narrative on the relevance of energy efficiency for the production cycle becomes an integral part of the entrepreneurial strategy.

Case

Introduction and evidence

The potential of energy efficiency to sustained business improvement and an optimized production cycle in addition to energy savings is often disregarded in the communication of policymakers and expert statements. The current understanding of energy efficiency is partially outdated and needs to be replaced by a more dynamic and holistic view on the interdependence of industrial production and efficient use of energy.

The role of energy efficiency for the improvement of the production cycle was predominantly expressed during business stakeholder workshops in Italy and Ireland but also mentioned by stakeholders in other Member States. Especially participants of the Italian Business Stakeholder Workshop expressed that the implementation of innovative and energy efficient processes can improve product quality and contribute a positive company image. Further, the importance of audits as well as the potential of digitization has been highlighted as means to reveal potential for energy efficiency and process optimization.

Functioning principle and rationale

Current understanding of energy efficiency

Often, a simplistic picture determines the idea of energy efficiency. The predominant approach in industrial policy typically includes material, labour, time and energy as input factors. This prevailing linear analysis of value chains and production processes in industry models is outdated and needs to be complemented by an environmental dimension and product quality. Still, namely in the area of industrial production, the cost of energy efficiency measures is considered the key factor for investment decisions. An investment is considered profitable if the monetary savings for energy outweigh the investment. Since energy is considered just as one

production factor out of many, the importance of saving is ranked low – even more, if a negative interference with the quality of output is assumed.

From an economic perspective, payback time decides on the business case, determined by cost of energy and required investment. However, if cost of energy is just one out of many elements in the price of a product, even a measure with a per se attractive payback period may be postponed, as higher energy cost may not be perceived as crucial in the overall competitive picture.

Investments of organizations are strongly influenced by routines and a priori rules that frame and control decision-making that fail to incorporate the complexity of multiple production factors and other dimensions such as legislative framework, environment and product improvements. In accordance to the predominant shareholder value, companies tend to opt for investment decisions with high short-term profitability. Based on typical investment routines, an investment in the private sector must bear its own costs in short pay-back times, e.g. of two years, which excludes most energy efficiency measures as those are typically characterized by longer pay-back period. This perception simplifies energy efficiency as mean to cut costs, typically with a one-dimensional connection of investment costs and energy savings.

A frequently observed additional feature to this pattern are decision makers delaying investments in energy efficiency to maintain an attuned production process and to avoid varying output quality. The implementation of energy efficiency and process improvements typically requires a readjustment of the production cycle that implies transaction costs and might entail that outputs need to be monitored for the required quality after the implementation of the change. Often, companies are hesitant against this risk and therefore tend to delay investments in energy efficiency until production processes are panned or modernization cycles are necessary anyway.

A new and more holistic view on energy efficiency

Thus, a new and more holistic view on energy efficiency investments beyond cost savings needs to be established. An adequate payback-time strategy in today's transformative economy would not only be limited to energy cost savings, but would also include benefits beyond energy cost savings, e.g. reduced cost of labor, and the monetary implications of quality and process improvements as well as reduced environmental impact. Interrelations between input factors, environment and product output will need to be considered, as for example rising carbon prices will increase the cost of carbon intensive input material.

Besides low-hanging fruits such as lightning replacement, investments in energy efficiency are characterized by longer pay-back times, especially when it comes to production process improvements. In many branches, investment cycles for process equipment and machinery run to over 20 years.⁹ Companies will consequently feel the impact of today's investment decisions until almost the middle of the century. Starting early on the company-internal path towards decarbonization, reduces the carbon price risk and still assures that value chain and production processes can successively be adjusted towards a low-energy and carbon-neutral production cycle.

Combining the chances of digitization with those of the 'new world of energy' can help to bridge the gap between production, energy management and maintenance. This can be enabled through intelligent and adaptable advanced analysis tools. Ensuring seamless integration of data and information across the plant combined with state-of-the-art production control algorithms and artificial intelligence are important means to deal with increasing volatility in production, energy and raw material availability. To realize energy and cost savings through optimizing the production cycle, planning models must be expanded to cover larger problem instances and energy consumption, e.g. to allow for industrial demand-side management. Optimization of production processes through digitalization offers tremendous potential for higher energy efficiency and an overall improvement of the production cycle. Digitalization allows for improved process control and operation with machinery and electrical equipment becoming radically more integrated. New measurement approaches and algorithms increase the confidence of condition monitoring techniques and reduce the need for periodic maintenance rendering production processes more efficient. Integrating energy efficiency with equipment management and input material optimization offers huge potential for businesses and industries to a sustained reduction of energy costs and improved output quality with a positive impact on international competitiveness.

Broad business improvement potential and innovative character of energy efficiency can be triggered by more supportive audit regulation. Supportive audits are based on a holistic company perspective with the objective of helping decision takers to reduce complexity of the decision environment. To persuasively illustrate the huge potential for business improvement that lies in energy efficiency, audits should provide guidance towards beneficial energy efficiency measures with highly specific recommendations on technological options and digital solutions tailored to each individual type of industry and business.

State-of-the-art auditing shows that identifying saving potentials often comes along with optimization not only of the energetic performance but of the overall production cycle, and thus positive implications on quality of output, cost of production and lifetime of equipment. However, this potential for business improvement can only be tapped, when companies do not regard energy audits as formal obligation to comply with but as valuable new insight, they are willing to work with.

Policy implications

⁹ Agora (2020). Sustainable Industry - Working with the industry to ensure the development and commercialisation of key decarbonisation technologies. Available at: <https://www.agora-energiewende.de/en/projects/sustainable-industry>

Audits tailored to the needs of businesses and industries are a key lever to promote the implementation of innovative and sustainable production processes. Two key elements for improving the impact of audits can be derived:

Way in which audits are made mandatory

A key aspect for ensuring responsiveness within companies is the level of reporting. When audit results must be discussed at board level, chances for a substantial implementation of suggested measures are significantly higher than if dealt with at subordinate levels.

Way of reporting in companies

With respect to the (policy) design of audit schemes, the success rate increases when not only focusing on the yes-no question (has an audit taken place or not) but on the quality and level of detail, in combination with subsequent implementation. Training programs for auditors and an industry-specific professional focus of auditors on new technologies and process innovation as well as on investment and costing can be a strong lever raise the awareness among decision takers in companies to take forward-looking investments and to avoid stranded assets.

Communication & awareness

Broad awareness raising on the overarching business (not solely energy related) benefits needs to start, by explicitly communicating improvements of the overall production cycle that were achieved originating from energy audits. On the one hand, competitors are likely to follow interesting examples, on the other hand, and probably more importantly, in the era of digitization, sector coupling and resulting competitive effects, it will sharpen the attention that energy is no longer to be regarded as a linear factor in the production cycle but a highly dynamic element within complex economic processes and requires according consideration.

From audits to energy management systems

Policy instruments should, besides providing guidance on how to make audits meaningful, also give incentives on subsequently establishing energy management systems, to trigger the full chain of 'insight – decision – action - communication'.

Context and transferability

EU context

To support EU companies and industries becoming the world's sustainable industry frontrunners and remain globally competitive in the long term long-term, strategic planning is urgently required. Appropriate and predictable carbon emission prices are essential to enable companies and other energy consumers to take future-oriented investment decisions. Support programs for energy-efficient production processes, e.g. via Carbon Contracts for Difference (CfD), can close the gap in industries where carbon prices do not yet trigger the technology and process investments that will be necessary to reach the agreements among the international community. Pilot projects and project evidence as well as best-practices are important means to deliver technology prototypes for energy and cost savings at the scale of production processes and can support companies to introduce new technologies and process innovations. Also, there is a need for further research to address current technology gaps and training to improve the effectiveness of audits.

Transferability across Member States

The value of audits can be improved through specialisation of auditors on particular technologies, industries and digital solutions. Allowing for steady relation building between industry and auditors instead of one-off contacts is key to increasing the quality of audits and developing tailored services and according business models. Long-term relations are also essential for energy service providers to reduce the cost risks of clients, e.g. through energy performance contracting and by including success fees, internalizing external costs in energy prices and balancing costs of electrical and thermal energy. Frequent changes in support schemes and other policies should be avoided to facilitate the development of convincing and consistent business models. Dedicated support for favourable behaviour of energy consumers

or for using audits and energy-efficient process optimization can be incentivized, e.g. through tax reduction.

Case study 07: Empowering research and innovation for carbon neutral transformation

Narrative summary

Research and Innovation plays an – often underestimated – key role in the energy transition. On the one hand, it creates the basis for technological and economic innovation and thus contributes to competitiveness, on the other hand it has a significant impact / forms part of a narrative. If through research and technological innovation new approaches are developed in a country, these create an echo in public debates as interesting future option and contribution to modernisation. Traditional patterns of public perception (e.g. not seeing alternatives to established energy generation and consumption) and fear of loss are put into new perspectives. Depending on the depth of research results, they can be over-written by a new narrative: a) change is possible, b) it provides concrete chances and c) they may have the potential to outweigh the loss of old industry branches. In addition to the public debate in general, there is a considerable multiplier effect through young researchers graduating from technical colleges and universities. Junior staff engaged in research on technological innovation will develop into agents of change and lay important foundations for gradual opening of societies for new thinking. Or, on the contrary: if there is no chance for junior staff to get in touch with innovative approaches through research, this may result in a massive lock-in risk of outdated technologies and according lack of popularity of energy transformation.

Stakeholders highlighted the relevance of the research, development, and innovation landscape in EU Member States for advancing the energy efficiency narrative in multiple dimensions, underlining in particular:

1. research and development as fundamental vectors to develop – and help to popularise – the innovations, technologies and processes needed to deliver the transformation;
2. the central role of research and development institutions, innovating businesses, and the supporting funding bodies in stimulating a market uptake of innovative sustainable technologies and processes;
3. its elite building function, influencing societal debate on energy efficiency and energy transformation as aspects of technological innovation and contribution to industrial modernisation.

As a way forward, the input received by EEW4 suggests that only an effective and inclusive collaboration between education, academia, research organisations and businesses will enable the sector to deliver its full potential for powering the uptake of energy efficiency solutions and the carbon neutral transformation as a whole.

Case: conceptualising an inclusive innovation infrastructure

Business stakeholders found that the research and innovation landscape in Member States is not tapping the full potential in the sense of popularization of the energy transition, stimulating market uptake and according elite building. Among the hampering factors applying to the respective national contexts, stakeholders identify 1) a missing involvement of businesses and organisations outside a restricted circle of institutionalised academia by the research sector and relevant public funding lines; and 2) a constrained capacity of the research and development sector to bring innovations to the market and stimulate broad market uptake, or to respond to rapidly evolving processes, technologies and markets.

Most prominently, stakeholders from Bulgaria expressed a concern regarding the institutional

landscape in their country in particular fostering old technologies, but also in other workshops, namely during the one held for France, it was mentioned that structural conservatism of institutions and according policies to establish research programmes and platforms for innovation (e.g. HighTech Parks) are an obstacle to opening the public debate and promoting agents of change to the extent it is needed for the dimension of transformation in the energy sector.

Innovation as the bedrock of energy efficiency policies and markets to pave the way to the carbon neutral transformation – this storyline permeates key points and suggestions made by Bulgarian stakeholders received by the EEW4 team, e.g. in that ‘transformations, including the energy transition as a transformative process, should be based on innovation’.¹⁰ Stakeholders emphasised that businesses are willing and ready to be front and centre for driving innovation processes for products and services. From an economic standpoint, business-driven innovation is also identified as a key vector to address and improve issues of limited competitiveness. Stakeholders in Bulgaria and France highlighted that the research landscape was focusing too much on old technologies, continuing to promote them despite different priority setting in energy policy and thus also giving misleading signals to young researchers. Besides potentially problematic impacts on establishing new technologies, this was also a missed chance for narrative development, using young professionals as innovation carriers and promoters of change in the ‘new world of energy’.

Relatedly, the institutionalised research landscape was found to have a strong focus on education and fundamental research and, importantly, missing opportunities for collaboration for research, development, and innovation with actors outside institutionalised academia. Inadequate involvement of businesses is also seen as key issue regarding public research programmes and initiatives. As an example, initiatives to establish excellence centres and regional innovation centres did not succeed to deliver on expectations. The procedure for the latter was launched twice but then abandoned given that it could not involve universities only. Ensuring reliability and trust in programmes supporting research and innovation would therefore be crucial, as well as limiting administrative hurdles:

‘The major requirement was for a new legal body – and many of the potential beneficiaries went through a lot of administrative and legal procedures to formalise their partnerships. At the end of the day, the procedure was terminated, and all these efforts turned out to have been in vain. This sent a bad message for businesses.’

Stakeholders identified a lack of understanding on the political and administrative levels in Bulgaria and wider Eastern Europe for the need of innovative pilot projects involving businesses – even though tangible best practices are deemed more convincing than political commitments.

Functioning principle and rationale

Arguments and storylines presented above explicitly refer to topics of research, development, and innovation and underline the need for synergies and collaboration between the three. More implicitly for some, they also speak to related themes of infrastructure development, modernisation, stability of policy initiatives and improving competitiveness which may be regarded a another, deeper driving force in contexts such as Bulgaria.

Narratives and storylines that highlight opportunities in these thematic areas as key drivers for energy efficiency and the carbon neutral transformation as a whole are clearly not yet institutionalised in ways that would allow them to structure public discourses, at least regarding the exemplary case examined in this case study. These narratives rather appear to be a stage

¹⁰ Statement from the EEW4 Business Stakeholder Workshop in Bulgaria. Full Event Report available at: <http://www.energy-efficiency-watch.org/media/publications/EEW-Business-Stakeholder-Workshop-BG-Event-Report-ext.pdf>.

where they would need to be developed and promoted further so that they better motivate adoption and effective implementation of corresponding policies and measures as a result. At the same time, the input received indicates that exploring links and embedding or linking energy efficiency policies to the broader topic of research and innovation policy would be effective in contexts such as the one described for Bulgaria. Corresponding storylines and narratives would have significant potential to resonate with society and the business community in particular. This can also be seen in the results of the EEW4 survey of energy experts carried out in 2020 with over 1,200 respondents from all across the EU-27.¹¹ In the survey, modernisation and infrastructure investments, employment, and competitiveness and innovation are identified as the three most important general topics in the public debate in Bulgaria for instance, confirming the salience of the issue as well as the potential for leveraging it in storylines in the context of sustainable energy and energy efficiency.

Policy implications

The stakeholder input received provides indications for how narratives encouraging energy efficiency in the context of research, education, and innovation can be translated into effective action. In order to be credible and effective, initiatives to enhance the research, education, and innovation landscape – including for energy efficiency solutions – would need to be:

1. robust, i.e. well designed, coordinated across relevant levels of governance and supported by the central administration;
2. inclusive, i.e. stimulate involvement of innovating businesses and collaboration between them and research and education institutions;
3. integrative, i.e. involve local communities to enhance acceptance, exploit synergies, and nurture local ecosystems and support them to grow into tech parks or similar ecosystems to enhance market competitiveness;
4. target-oriented, i.e. be in line with the current and foreseeable objectives and requirements of the carbon neutral transformation.

Importantly, a clear need for action is seen for opening opportunities for participation and collaboration of research and innovation actors from the business community in national research and innovation schemes. As noted for the case of Bulgaria, this may include access to public support programmes and funding lines, and related administrative requirements, such as the classification as research institutes, or application procedures. Having the institutional recognition or classification on the national level can also have implications regarding access to EU research and innovation programmes. Generally, relevant experience and expertise should constitute the key selection criteria, not necessarily being a traditional academic body or a university, as stakeholders emphasised. The underlying vision would be to stimulate a productive interplay between education, academia, research, and business innovation as a potent enabler for the carbon neutral transformation.

Moreover, tangible pilot and lighthouse projects involving market actors are highlighted as a key vector to generate market uptake, buy-in, and replication throughout the private sector. Accordingly, these should be encouraged through adequate levels political support, funding, and exposure to maximise their impact as multipliers. Related opportunities for cross-border projects, peer-learning or teaming can be highlighted. For instance, stakeholders in Bulgaria see in regional industrial parks in Spain a successful approach to learn from for the Eastern European space.

Narratives advocating for greater collaboration between research, education, and market

¹¹ Full Survey Report available at: <http://www.energy-efficiency-watch.org/media/publications/EEW4-survey-report.pdf>

innovators should of course not be confused with arguments nor make the case for privatisation of research and education, which may rather stir opposition than resonate in supportive ways. In order for related storylines not to backfire, innovators and stakeholders should also be clear regarding investment risks related to innovations, particularly in an SME or start-up context.

Context and transferability

EU context

The European Green Deal attributes a central role to research and innovation in accelerating and navigating the necessary transitions, as well as in deploying, demonstrating and de-risking solutions and engaging citizens in social innovation. Research, innovation and competitiveness also constitute one of the EU's Energy Union core dimensions.¹² This field of action is therefore prominently anchored in the EU's overarching transformation strategy and discourse, consistent with it being a demonstrated key area in terms of direct support. Horizon Europe and LIFE are just two of the EU's multiple funding programmes for research and innovation that also feature a strong sustainable energy and energy efficiency component.

The NextGeneration EU fund provides additional resources to promote energy efficiency in the context of modernisation, innovation and infrastructure development. This would also contribute to achieving the scheme's share of 37% earmarked for climate expenditure. Member States' Recovery and Resilience Plans are a great opportunity to stimulate the sector and develop the innovation infrastructure where needed, e.g. innovative tech parks in Bulgaria, and to include approaches such as the Teaming programme to create or update centres of excellence by coupling them with a leading scientific institution, as stakeholders' input to EEW4 confirmed.

Transferability across Member States

In order to resonate effectively with society, enabling narratives need to be adapted to the specific national or regional contexts. Generally, we can expect narratives that speak to considerations for industrial competitiveness and innovation as well as modernisation and infrastructure investments to resonate effectively in many societies across the EU, as these were ranked among the top three of the most important topics in the general public debate by the over 1,200 energy experts consulted by the EEW4 survey from across all the EU-27.¹³ The fact that investments and competitiveness are the topics most linked to energy efficiency (ibid.) points to the potential for narratives connecting the two, whereas linkage to themes of competitiveness would seem particularly promising giving that these are already predominantly positively discussed in the context of energy efficiency, as indicated by the survey (cf. *Figure 1* below).

Regarding implementation of the narrative into actual measures and policies, the transferability of narratives linking innovation and energy efficiency themes would also depend on the existing structure of the research and innovation landscape. In contexts of long-established systems that experienced little change or reform over time, it might be harder to translate such narratives into action compared to countries where the research and innovation is more used to dynamics of reform and adaptation.

¹² https://ec.europa.eu/energy/topics/energy-strategy/energy-union_en

¹³ Full Survey Report: <http://www.energy-efficiency-watch.org/media/publications/EEW4-survey-report.pdf>

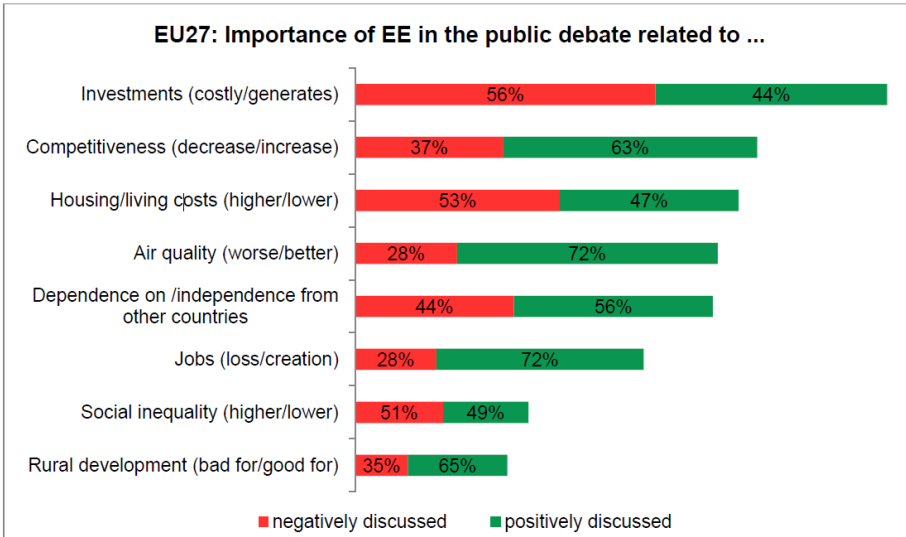


Figure 1: Importance of topics related to energy efficiency in public debates (EEW4 Survey 2020)

Case study 08: Education, training and upskilling for carbon neutral transformation

Narrative summary

Acceptance of energy efficiency and new energy technologies is influenced to a large extent by the trust of end clients in the competence of planners, builders and installers. This starts with getting the right advice on how to newly build or modernize, making the right choices on best available technologies and building techniques and have installations made and work implemented accordingly. Currently, however, planners and installers whose professional education and training dates back several years or decades, are not sufficiently familiar with new applications and may thus, also fearing a risk of making mistakes, advise their clients the use of solutions which are no longer state of the art. Besides these concrete deficits, also the pace of adjustment in upskilling does not meet the requirements of the energy transition. This is problematic mainly in two ways: on the one hand for the technology and carbon lock-in, combined with loss of property value on the clients' side, and on the other hand in the context of narratives, weakening the case of energy innovation.

The overarching narrative of observed deficits in education and qualification and related challenges encompasses different strands of arguments that may also depend on the context in which these are articulated. They include references to:

- Lack of technical knowledge and skills to deliver climate-friendly innovations but also available well-established solutions in key industries, for instance in the buildings sector, due to missing opportunities for continuous training and development. In the absence of incentives for change, this is complemented by a certain habitual inertia along the lines of 'we have always done it this way'.
- A vicious circle of a supply side lacking know-how for providing state-of-the-art climate-friendly solutions and a demand side having little trust in the quality of available innovative market offerings, thereby leading to lock-in effects.

- This issue seems particularly relevant in the context of rising complexity of efficiency solutions in general and of highly fragmented markets in particular. Comprehensive home renovations to improve energy performance are a case in point, considering the significant transaction costs arising from the need to coordinate multiple crafts they often entail for consumers.
- On a more general level, a mismatch perceived between the focus of the education system and the qualifications needed to implement the energy transition.
- Overall, insufficient incentives and requirements found to foster training and upskilling in certain contexts.

The examples and lines of argument explored in this case study are particularly relevant for sectors of the economy whose workforce faces a need of enhanced continuous training and upskilling, for regions with a carbon-intensive or post-industrial background undergoing structural change where reskilling and requalifying staff from declining industries is a priority, as well for general education and basic training, respectively.

Therefore, educating and training professionals and future professionals to have the qualifications and skillsets needed to deliver the transformation to climate neutrality is essential at societal level. Planners, builders and installers are needed also as empowering multipliers and ambassadors for change and innovation. Policy instruments aiming at establishing energy efficient and other innovative energy solutions need to create strong links to professional training, foster the establishment of upskilling programs, implement curricula for technological qualification and new job profiles together with according educational institutions and relevant industrial branches.

Case evidence from EEW4 on education, training and upskilling

Training and upskilling needed to transform the buildings sector

Given that three in four buildings in the EU are not considered energy efficient while 85% to 95% of today's buildings will still be in use in 2050¹⁴, the sector represents a key challenge the EU needs to address in order to reach climate neutrality by mid-century. The buildings industry is also the sector stakeholders providing input to EEW4 most prominently highlighted regarding the need to develop knowledge and skills of professionals. Business stakeholders from Italy, Ireland and Germany all expressed concerns about the impact of inadequate training of groups of building professionals and a negative image sometimes associated with certain building renovation techniques. Both are viewed as major stumbling blocks preventing them from promoting or even offering optimal solutions both from an environmental and financial standpoint, with adverse effects e.g. on the renovation depth when building energy performance is to be improved.

Very practically, stakeholders in Ireland for instance pointed to poor skills regarding wall and roof insulation especially for older buildings, and a lack of proper guidance on the best solutions to implement. In combination, these issues exacerbate the predominance of conventional approaches unfit to deliver the climate-neutral transformation, often justified along the lines of 'we have always done it this way'. Storylines like these may even become a self-fulfilling prophecy when clients insist on ambitious or novel renovation solutions anyway, thereby exposing themselves to the risk of obtaining suboptimal quality in execution at higher costs. Lock-in effects in terms of conventional renovation and constructions approaches are observed as a result. EU-level analysis confirms that intermediaries, i.e. installers, architects, energy advisors etc. who interact directly with consumers are driven both by their own motivation, possibly including environmental concerns, yet in many cases also by the most hassle-free

¹⁴ Cf. https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/renovation-wave_en

delivery, installation and after-care.¹⁵ These aspects are influenced by the quality and service offered by manufacturers of components and technical building systems, contributing to strong links between them and installers or main contractors. Consequently, narratives aimed at empowering the buildings industry to decarbonise need to address the entire value chain of the sector and the full bandwidth of market actors.

Particularly when seeking to contract services for deep energy retrofits¹⁶, consumers face great difficulties in finding market offers with the needed expertise and experience, as stakeholders recognised. This of course also links to the traditional fragmentation of the market with the multiple separate crafts (installers, brick layers, carpenters, plumbers, electricians, etc.) that typically need to work hand in hand for such encompassing assignments. Importantly, the market structure with the prevalence of SMEs often implies limited resources available to invest in continuous training and development opportunities for staff. At corporate level, this may in turn result in missing new market opportunities and the risk of losing competitiveness and on the other hand an overall pace of change lagging behind ambition at macroeconomic scale. In Germany, the expected massive shift from gas heating to electrical heat pumps puts up a major challenge, as heat pump planning and installation requires a very different job qualification than that of traditional heating installers. It is therefore key for the success of the envisaged change to rapidly establish new technological education programmes to meet the upcoming demand, same as for integral consideration of the building envelope when advising for the right combination of insulation, modernization and heating system. An example for success in another sector is the job profile of 'mechatronic', a combination of mechanical and electronics engineer, which was jointly established by technical universities and key industrial stakeholders.

Aligning education and training systems with the carbon neutral transformation

Education and training institutions are key to raise awareness, empower agents of change and to provide relevant skills and qualifications. However, stakeholders e.g. in France observed a certain mismatch between the focus of the education and vocational training system compared to the qualifications and job profiles needed for the energy transition. Certain technical qualifications such as mechatronics for instance would not be sufficiently developed nor valued, even though they have a key role in delivering sustainable solutions. From a societal perspective, this potential needs to be activated to accelerate the transformation in line with the overarching climate objectives.

Stakeholders across the board also identified a need to expand general education on the energy transition and energy efficiency e.g. at school and university with a view to raise awareness, encourage climate friendly behaviour and spark interest in professions that drive the transformation. Possible ways of doing so could comprise adapting curricula, introducing new courses or establishing new programmes. As evidenced by their civic engagement for robust climate action, young generations are gaining significant traction as agents of change. This is a potential to be tapped not only in education and vocation training schemes but also in research and innovation in order to develop the solutions needed that are still missing (for more on topic, cf. EEW4 Case Study 8 on empowering research and innovation to fuel the carbon neutral transformation).

¹⁵ Cf. *European Commission (2019), Comprehensive study of building energy renovation activities and the uptake of nearly zero-energy buildings in the EU, prepared by Ipsos and Navigant*, available at <https://op.europa.eu/en/publication-detail/-/publication/97d6a4ca-5847-11ea-8b81-01aa75ed71a1/language-en/format-PDF/source-119528141>

¹⁶ I.e. renovations that significantly reduce energy use, e.g. by more than 60%.

Functioning principle and rationale

Beyond personal and professional development, the need for adequate education, training and upskilling links to broader themes relevant on both societal and corporate levels, i.e. job creation and retention, modernisation on the one hand and innovation, new business models and competitiveness on the other. To move forward, the key is to break vicious circles, e.g. between low supply and demand for innovative climate-friendly solutions, and to turn these into virtuous circles. Showcasing best practice approaches, debunking myths and preconceptions by proven facts and leveraging demonstrated benefits of climate-friendly solutions are the recommended instruments for achieving this on the operational level, as indicated by stakeholders.

More generally, transformative narratives need to address the individual, corporate and policy levels, e.g. by highlighting the potential for new and better jobs, for new or expanded business models as well as the aggregate benefits for society. When it comes to the buildings sector, the energy transition for instance requires a more integrated view e.g. on energy renovation, but also across the entire building life cycle. The need for integrated home renovation services, for efficient equipment, automation and control systems provides significant business opportunities for market services in this regard. Of course, the regulatory framework should not stand in the way of these opportunities and provide incentives where needed.

Policy implications

In key instances, the energy transition is not yet supported by adequate deployment of qualification and training measures. The need for training and upskilling, in the buildings sector and beyond, is acknowledged not only by stakeholders and consumers but also by many regulators by now. This opens windows of opportunities to build alliances to promote narratives that frame education, training and upskilling as a strategic vector of the carbon neutral transformation.

The theme is all the more relevant for transforming carbon-intensive regions, or regions undergoing processes of industrial transformation, and for making the related narrative of a 'just transition for all' deliver in practice, as policymakers highlighted in the EEW4 parliamentary workshops.¹⁷ Experience in many European industrial regions that underwent processes of structural change offer plenty of insights and examples from the ground to learn from. These include reskilling professionals for available future-proof employment, but also establishing new or expanding existing research and education institutions in these regions as agents of change as part of a forward-looking strategy. In general, education and training institutions should be empowered to take an active role in the transformation. More than ever, close interaction between education, academia, research and businesses is needed to stimulate the change and innovations needed for the transformation.

Capacity building and training should generally not be considered as a detached element which just follows other processes, but rather be understood as a constitutive part of the transformation and clearly embedded in the overarching strategy. Crucially, the need for training, upskilling and reskilling should be addressed from early on, i.e. whenever possible before disruptive changes materialise. Policymakers have a role to play for assessing the need to devise incentives, programmes or requirements to improve capacity and skills in the areas where deficits are prevalent.

Taking the example of the buildings sector, evidence indicates that the intermediaries, i.e. architects, installers, contractors etc., are a key target group to address in order to enhance the uptake and impact of deep energy retrofits. Above all, these are the actors seek and obtain

¹⁷ For more on the topic of just transition, cf. the EEW4 Case Study 10 on transformation policies in line with social justice.

advice from when deciding about the extent and depth of energy efficiency measures.¹⁸ Typically, they are also the main point of contact when consumers encounter necessary maintenance, replacement or inspections, all of which constitute key trigger points for households to undertake energy efficiency measures. These groups of professionals should therefore have the skills, capacity and motivation to act as ambassadors for promoting energy renovation of technical building systems.

When setting up new policy instruments, their correlation to education, training and upskilling should per default be considered and tackled, e.g. in form of an overarching policy package.

Context and transferability

EU context

The EU clearly recognises the potential for leveraging learning and upskilling as part of its broader transformation strategy. Key actions, approaches and initiatives planned until 2025 are compounded in the [European Skills Agenda](#). The five-year plan aims at helping individuals and business develop more and better skills. Ensuring sustainable competitiveness, social fairness and providing access to education, training and lifelong learning and enhancing resilience to react to crises are highlighted as the strategy's key objectives that also interlink with the European Green Deal and the European Pillar of Social Rights. As the first of the flagship actions under the agenda, the European Commission launched the [Pact for Skills](#) to reach out to both public and private organisations to join forces and take concrete action to upskill and reskill people in Europe through a joint charter and promoting individual commitments. EU funding for investments in skills is mobilised through the European Social Fund Plus and the Erasmus programme in particular, as well through InvestEU scheme and other schemes. More specifically regarding the buildings sector, the EU's Skills Agenda and the Pact for Skills are also referenced in the European Commission's [Renovation Wave](#) that describes the strategy for decarbonising the EU's existing building stock in line with the overarching climate objectives. Through platforms such as the [BUILD UP Skills initiative](#) the EU has also directly supported training and upskilling projects in Member States. With the initiative of the [New European Bauhaus](#), designed as a forum for exchange on climate-friendly architecture, the EU also puts forward the cultural and social dimensions of building design.

In sum, the EU takes significant action to address skill gaps and to promote lifelong learning. However, Member States, sometimes regional administrations, depending on national constitutions, remain the key actors directly in charge of education and training, given both the legal distribution of competences across governance levels and the resources they operate.

Transferability

The challenge of providing adequate skills and qualifications for the carbon neutral transformation is one that transcends national boundaries, as evidenced by the stakeholder input received. While the buildings sector stands out as particular priority in this regard, it is not the only one requiring attention. For instance, narratives taking up this topic were also found relevant for the tourism sector and to develop sustainable tourism in particular, as Cypriote stakeholders highlighted. Similarly, a better integration of climate and energy efficiency subjects in general education was found to be priority across the board regardless of the country context. The transboundary and cross-sectoral nature of the challenge suggests that narratives aimed at enhancing education and training in line with the prerequisites of the carbon neutral

¹⁸ Cf. *European Commission (2019), Comprehensive study of building energy renovation activities and the uptake of nearly zero-energy buildings in the EU, prepared by Ipsos and Navigant*, available at <https://op.europa.eu/en/publication-detail/-/publication/97d6a4ca-5847-11ea-8b81-01aa75ed71a1/language-en/format-PDF/source-119528141>

transformation should a priori have a good potential to resonate effectively across Member States. This is also indicated by the strong links of this theme to considerations for employment, industrial competitiveness and modernisation – given that these are found to be the three most important topics in the general public debate for 27%, 20% and 14% respectively, as found by the over 1,200 energy experts consulted by the EEW4 survey from across all the EU-27.¹⁹ In the end, the specific focus and focus of enabling narratives still needs to be adapted to the specific national or regional contexts of course to maximise impact.

Case study 09: Transformation in line with social justice

Narrative summary

The political feasibility of the green economy transformation depends above all on the acceptance by society. A socially balanced distribution of its costs and benefits and complementary social policies are essential, especially to ensure the acceptance of carbon pricing as the central instrument on the EU-level to mitigate carbon emissions.

Carbon prices can be expected to increase significantly over the coming years. Increasing electricity and fuel prices will be challenging for vulnerable households and will need to be addressed by social policies. Enabling vulnerable households to lower their energy use is another elemental lever to counteract the carbon-price-induced increase of energy prices. Smart and effective energy efficiency measures will need to be supported and can play an important role to reduce the impact of rising carbon prices on households' income.

From the narrative angle, particular attention must be paid to the aspect of transparency. Social compensation mechanisms structurally face the risk that – due to the complex composition and externally driven volatility of energy prices – end consumers may not be able to judge to which extent they are compensated, and for which part of excess cost. First opinion polls and studies, e.g. from Switzerland, suggest that even though for lower income households compensation outweighs the extra burden of the CO₂-tax, end customers perceive being negatively affected. To make compensation mechanisms work, they need to be accompanied by comprehensive and illustrative information on the price effect of the CO₂-tax and the directly related redistribution. Such narrative element needs to be an essential part of any CO₂ price and compensation policy package to ensure its success.

Case & Evidence

Business stakeholder workshops in Bulgaria and France alluded that energy poverty is a central issue for vulnerable households that needs to be addressed, also relating to matters of social housing, affordable energy renovations and financial tools for thermal renovation of houses and condominiums. In addition, significant discrepancies between rural and urban populations have been conveyed regarding perceptions of affordability and environmental considerations of mobility.

With the protests of the “yellow vests” movement, the *gilets jaunes* in France and beyond from 2018 onwards, the argument that vulnerable households are particularly affected by rising carbon prices as they spend a higher share of their income for energy gained prominence. A detailed analysis of the distributional impact of carbon pricing, however, shows that such accounts are often simplistic and predominantly unsupported by facts. To the contrary, in many cases carbon pricing can reduce the gap between rich and poor, as shown by a meta-study led by the Mercator Research Institute on Global Commons and Climate Change (MCC) in

¹⁹ Full Survey Report available at: <http://www.energy-efficiency-watch.org/media/publications/EEW4-survey-report.pdf>

cooperation with the German Institute for Economic Research (DIW).²⁰

In Germany, the introduction of a national emissions trading system in 2021 has been highly influenced by the *gilets jaunes* debate in France. Keeping the national carbon pricing socially fair has been a key priority of the government leading to strong social compensation accompanying the launch of the scheme via a decrease of the renewable energy levy and a raise of the commuter tax relief.

Functioning principle and rationale

Designing and communicating transformation policies in line with social justice and ensuring a fair distribution of costs and benefits is essential for bringing the green economy transformation to success. As carbon prices will continue to increase in order to achieve climate targets, vulnerable households need to be protected and enabled to lower their energy use and hence their exposure to higher carbon prices.

In many countries, discourse on carbon pricing is typically hindered by the perception that market-based climate protection via increasing carbon prices is socially unfair per se. This argument is in particular cultivated by representatives of fossil-fuel industries because the profitability of their investments decreases with more ambitious climate policy and rising carbon prices.

The willingness to accept a certain carbon price depends to a large extent on political, economic and cultural convictions as well as on trust in institutionalised politics. For example, citizens in Germany and China are more willing to pay a higher carbon price if they have a higher level of education.²¹

For the success of the green energy transformation it is essential that rising carbon prices do not contribute to increasing inequality in the industrialised nations. The current design of carbon pricing schemes, e.g. in the EU and Germany, does not include effective mechanisms to compensate citizens for the additional burden on their income. For the acceptance of rising carbon prices, it will, however, be important that citizens associate compensation mechanisms and the according benefits directly with the carbon pricing scheme.

The introduction of a national carbon price in Germany was accompanied by effective compensatory measures which, however, will not be associated with the carbon pricing scheme as carbon prices increase. To compensate the additional financial burden of carbon prices for households, the German government announced the decrease of the renewable energy levy and a raise of the commuter tax relief. It has been found that the German approach succeeds to compensate the distributional impact of the national carbon pricing scheme.²² Still, it is to be expected that there will be no positive impact regarding the acceptance of increasing carbon prices from the complementary social policies as those are not directly associated to the national carbon pricing scheme.

It is essential to ensure acceptance that households will not perceive carbon pricing as another constantly increasing tax. Citizens need to feel that carbon pricing is intended not only for the benefit of the climate but also for their individual advantage. This can only be achieved through an effective and transparent compensation mechanism directly associated to the carbon pricing scheme, e.g. in the form of an annual payment cheque to citizens with a *carbon pricing bonus* for the redistribution of the carbon pricing revenues.

Communication that emphasizes the advantages of carbon pricing is essential for the political acceptance of carbon prices. The annually recurring payment cheques are an excellent

²⁰ Ohlendorf, N., Jakob, M., Minx, J., Schröder, C., Steckel, J., 2020, Distributional Impacts of Carbon Pricing, Environmental and Resource Economics. Available at: <https://doi.org/10.1007/s10640-020-00521-1>

²¹ Ohlendorf, N., Jakob, M., Minx, J., Schröder, C., Steckel, J., 2020, Distributional Impacts of Carbon Pricing, Environmental and Resource Economics. Available at: <https://doi.org/10.1007/s10640-020-00521-1>

²² MCC (2020). Carbon Pricing - Das deutsche Klima-Finanzpaket. Available at: <https://blog.mcc-berlin.net/post/article/das-deutsche-klima-finanzpaket.html>

occasion for explaining the reasons of carbon pricing and the source of the annual payments to the citizens. It should be highlighted that rising carbon prices are good deal as this will increase the annual cheques.

Policy implications

The acceptance and a socially balanced distribution of costs is essential for carbon prices which are the central instrument to avoid carbon emission on the EU-level. It is advisable to be transparent on how income generated from carbon pricing is used and to compensate vulnerable households to raise acceptance. Transparency can be achieved by earmarking the income for specific purposes, a transparent tax policy or with an annual check for the compensation payment to each citizen. Providing vulnerable households with the necessary infrastructure and information is another important element to improve transparency on their energy use, carbon impact and resulting costs, e.g. through comprehensive and accessible information smart meters and energy bills. To maintain social and political acceptance, carbon pricing should be complemented by policies for social compensation at EU and national level. Another lever to assure the acceptance of carbon prices is to reduce the energy use of households. Providing support and guidance for implementing smart and effective energy efficiency measures reduces the impact of rising carbon prices on household's income. Measures such as energy-efficient social housing and support for energy-saving retrofits provide long-lasting solutions for vulnerable households as they permanently lower energy bills. Addressing the landlord-tenant dilemma is another important element to align incentives for the implementation of energy efficiency to decrease energy costs and thus the impact of carbon prices.

Context and transferability

EU context

To ensure acceptance for rising carbon prices on EU level, revenues should flow back to EU citizens. The income from carbon pricing or a particular share could be passed on to Member States earmarked for social policies and/or energy efficiency measures for vulnerable households. Poland's proposal to create an Energy Solidarity Fund to support programmes that decrease the energy expenses of vulnerable households shows one possible approach for implementation. Earmarking the revenues from carbon pricing for annual payments to citizens, to be paid via Member States, are another option to ensure acceptance.

Transferability across Member States

Social protection systems play an important role on national level in mitigating the impact of energy costs on vulnerable households. Social benefits such as unemployment benefits and minimum income schemes tackle energy costs indirectly by increasing the disposable income of vulnerable households. Direct support to decrease the energy costs can be provided through energy bill subsidies and reduced tariffs. National policies and social programmes are another instrument to address rising energy and fuel costs taking account the varying exposure of vulnerable households compared to wealthier income groups. An advisable option to ensure the acceptance are annual checks to return carbon pricing income to citizens.

Case study 10: 'Just Transition'

Narrative summary

The term 'just transition' has become very prominent in the political debate across all member states from the moment when it became obvious that decarbonization until mid of the century was an inevitable political necessity and would have to be enforced. 'Just transition', as a short and catchy slogan, comprises in fact a broad range of associations and statements, which are

all closely related with societal acceptance. The emphasis in the public debate that is laid on the term 'just' explains by historical experience of (often suddenly felt) structural change without social backing, occurring in numerous western European countries between the late 1970s and the early 1990s, and sharp structural breaks in eastern European countries after 1989. The impacts of these structural changes affected large parts of the respective populations and are often collectively remembered as painful and sometimes traumatic, leading to an emotional tone in the debate. Despite the validity of such experiences, they may create misleading narratives on the concept of transition.

1) Transition is inseparable from any economic action, so there is no 'opt-in' or 'opt-out' decision. 'Just' transition may be misunderstood in the way of a choice to be made: either you promise the transition will be 'just', or we will opt out. Against a tight timeframe for decarbonization, also the above order is problematic: first, financial compensation is to be promised, then societal consensus about decarbonization can follow.

2) The term 'just transition' may suggest that, without explicitly adding 'just', the transition would necessarily be unjust. It may thus downplay the compensatory effects (i.e. creation of new jobs and economic perspectives) and result in structurally exaggerated, upfront claims for compensation without a clear analysis of particular needs.

3) Whilst the problematic experience dominates the collective memory, on a macro level the transition processes of past decades have generated valuable insights on how to be well prepared and take adequate pro-active measures to avoid ruptures and actually outweigh them by opportunities. This is a big asset for future transformation processes.

Therefore, the debate around the 'just transition' should cautiously establish a narrative asking for acceptance of change and motivating for individual responsibility to take the opportunities of the green energy transformation. Assets of the change must be highlighted better: e.g. industrial regions affected by structural change tend to have good transport infrastructures and experienced workforce. If well managed, those can provide a promising market environment for new business development that will not heavily depend on social transfer. Justice must also be interpreted as inter-generational, i.e. the next generation will be burdened inappropriately if no action is taken now. The new narrative allows to frame adaption to something new in an environment of change as a strength and elemental contribution to achieve the green economy transformation. It illustrates the huge historical experience of various regions in Europe in managing structural change, which proves that the EU is globally well-positioned to navigate successfully through the green economy transformation.

Case & Evidence

Economic policy in various countries in Europe has been historically characterized by protectionist elements with the objective of preserving jobs in economic sectors in decline. In the EU's industrialised societies, a static production and economy had traditionally been perceived as being robust and powerful.

Historical evidence, however, has proven that delaying structural change will lead to a negative job effect as observed in the hard coal and lignite extraction industry, e.g. in Belgium, the United Kingdom, the Netherlands and Germany. A rule of thumb based on the experience with structural change condenses the learnings: "one year of non-acting implies three years of pain"²³. Today it is widely recognised that dynamic and adaptable economies tend to be economically successful.

A new narrative needs to be established to prepare society that the green transformation is a huge task necessary to preserve our current way of living that can only be achieved if sectors in decline and its workers will take responsibility and chances offered by the new green economy. Narrative elements for the context of the Just Transition provide the foundation for this case study and have been developed during the Business Stakeholder Workshop in Bulgaria. The

²³ Evidence to be identified

Just Transition has also been discussed with French Business Stakeholders. The documentation of the statements is attached in the annex of this case study.

Functioning principle and rationale

The Just Transition narrative is used to communicate social policies with the objective of avoiding social imbalances in relation with the green economy transformation. It could, however, be argued that the Just Transition narrative is counterproductive.

Talking about “Just” Transition raises expectation that there will be no social imbalances during the green economy transformation, a transformative process that will impact all sectors of the economy for the next decades. The ongoing political and societal debate on how to achieve Just Transition delays necessary measures that need to be implemented to comply with the 1.5°C-target from the Paris Agreement. To proceed in the discussion on urgently necessary and effective climate protection measures in line with the Paris Agreement, it needs to be explained that it will be difficult to avoid discontent among all groups of society during the next decades of profound changes in all economic sectors implementing the green economy transformation. Accordingly, societies and policy-makers will inevitably have to choose whether they will be consequent in protecting workers in industries that need to decline or whether they want to take the necessary action to avoid the negative consequences of climate change.

Society needs to be prepared that our past and ongoing emissions have initiated a change that urgently needs to be dealt with. Emissions from fossil fuels and postponed action against climate change are the primary driver of job losses and social imbalances not structural change. The objective of a Just Transition will be achieved best if societal consensus will be reached that emissions must decline as soon as possible accepting that a broad transformative process implies change, possibly also with negative impact on particular industries and its workers but certainly with a future-proof long-term perspective.

Doubts about predominantly negative aspects of the green energy transformation are in no relation with chances for economic development and the extensive positive experience that has been made in EU Member States with successful structural change accompanied with supportive social policies.

Structural change typically occurs in geographic areas that used to be economic powerhouses with well-established infrastructure, e.g. a high-capacity electricity grid, well-connected transportation route as well as affordable space for commercial and industrial development. Often work force with high shares of skilled labour is available as an additional locational factor, altogether providing a gifted market environment for developing new ideas and businesses. New jobs are being created by the green energy transformation every day. Renewables, which represent only one flourishing industry that has emerged with the green energy transition, have already created 11.5 million jobs worldwide with 500.000 additional jobs being created each year.²⁴ New industries will arise in addition to renewables with numerous jobs and new opportunities opening up.

This new narrative stimulates individual responsibility of both, regions in structural change and its workers, and allows to frame adaption to something new in an environment of change as a strength and elemental contribution to achieve the green economy transformation to avoid climate change and protect our future generation. It builds on today’s broadly accepted perception that adaptive and dynamic economies and companies tend to be successful and robust in their business strategy. Becoming an active driver of the green energy transformation allows for a positive framing of changes as progressive and forward-looking instead of something that is imposed by external forces. Establishing this progressive and positive future image instead of raising fears and preventing change is key to establish acceptance for structural change and the green energy transformation.

²⁴ IRENA (2020). Renewable Energy and Jobs – Annual Review 2020. Available at: <https://www.irena.org/publications/2020/Sep/Renewable-Energy-and-Jobs-Annual-Review-2020>

Policy implications & Transferability

Just Transition implies the design of policies that avoid shifting the burden of the transformative process to prevent climate change onto social groups and milieus. Social policies to avoid negative impacts on particular groups of society should become part of a formalized policy design process for each transformative policy in the context of the green economy transformation.

In the communication of transformative policies, however, the component of transformative policies addressing social imbalances should not be in focus. Instead, policy makers should aim for illustrating the new chances offered by each policy associated with the green energy transition as tangible and anecdotic as possible to assure that societal groups negatively impacted by transformation will grasp their opportunities.

Also in ongoing transition processes, the front-runner narrative (EEW4 1. Case Study: 'It is beneficial to be a front-runner') can serve to over-write fear of loss by pride to be at the forefront of transformation. E.g. former mining areas diversifying their structure not necessarily lose their identity but can transform it into 'new energy region'.

EU context

On EU level, the topic of just transition is rather prominent in the political debate, mainly as its relevance for social peace is highlighted by numerous member states and stakeholder groups. Industrialized economies feel particularly vulnerable, also with respect to maintaining value chains and international competitiveness. For avoiding a 'race for compensation', an EU wide transformation pathway with clear perspectives for each member state needs to be developed, as envisaged in the EU Green Deal.

Transferability across Member States

Mutual learning and transfer of examples between member states is of relevance especially when sharing best practice on energy transition related projects leading to higher welfare in comparison with old industries. What should be avoided is a competition between member states about who expects to suffer most from the change and thus deserves the highest financial compensation. This must in anticipation be over-written by positive examples and according narratives.

Task 5.3 Testimonials

“EEW4 is extremely significant as it identifies narratives for energy efficiency that resonate in different national or regional contexts by linking the debate to recognized benefits that, beyond energy and costs savings, may include aspects such as improvement in air quality, modernization of buildings, jobs creation, climate protection, or energy security. The project outcomes presented help to improve the level of communication on the need for energy efficiency. This project offers supporting tools for policy makers. And in my case, it helps to accompany the drafting process of the recast of the EED and the Energy Performance of Buildings Directive (EPBD).”

Niels Fuglsang, S&D MEP, Energy Efficiency Directive (EED) Rapporteur

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Annex – Overview of EEW4 Input events and input channels

Event / input type	Geographic focus	Time	Link to documentation
Focus group workshop: Capturing narratives in energy efficiency – from concept and experience to analytical practice	EU	23.01.2020	http://www.energy-efficiency-watch.org/media/pdf/NAVIGANT-Workshop-Capturing-narratives-in-energy-efficiency.pdf
Business stakeholder workshop	Germany	28.01.2020	http://www.energy-efficiency-watch.org/media/pdf/NAVIGANT-National-Business-Stakeholder-Workshop-Germany.pdf
Business stakeholder workshop	Italy	27.- 28.04.2020	http://www.energy-efficiency-watch.org/media/pdf/NAVIGANT-National-Business-Stakeholder-Workshop-in-Italy.pdf
Business stakeholder workshop	Ireland	06.05.2020	http://www.energy-efficiency-watch.org/media/pdf/NAVIGANT-National-Business-Stakeholder-Workshop-in-Ireland.pdf
Business stakeholder workshop	Slovenia	27.- 28.05.2020	http://www.energy-efficiency-watch.org/media/pdf/NAVIGANT-National-Business-Stakeholder-Workshop-Slovenia.pdf
Business stakeholder workshop	Cyprus	15.- 16.06.2020	http://www.energy-efficiency-watch.org/media/pdf/NAVIGANT-National-Business-Stakeholder-Workshop-in-Cyprus.pdf
Business stakeholder workshop	Poland	08.- 09.12.2020	http://www.energy-efficiency-watch.org/media/publications/EEW4-External-Event-Report-POL-Business-Stakeholder-WS.pdf
Business stakeholder workshop	Lithuania	18.03.2021	http://www.energy-efficiency-watch.org/media/publications/EEW_Business_Stakeholder_Workshop_LT_Event_Report_external.pdf
Business stakeholder workshop	Greece	22.- 23.03.2021	http://www.energy-efficiency-watch.org/media/publications/EEW4_External_Event_Report_EL_Busines

Event / input type	Geographic focus	Time	Link to documentation
			s Stakeholder WS.pdf
Business stakeholder workshop	Bulgaria	07.- 08.04.2021	http://www.energy-efficiency-watch.org/media/publications/EEW-Business-Stakeholder-Workshop-BG-Event-Report-ext.pdf
Business stakeholder workshop	France	08.06.2021	https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.energy-efficiency-watch.org%2Fmedia%2Fpublications%2FEEW4-Event-Report_Business-Stakeholder-Workshop-France.docx&wdOrigin=BROWSELINK
National Parliamentary Workshop	Italy	23.04.2020	http://www.energy-efficiency-watch.org/media/pdf/EUFORES-Italian-National-Parliamentary-Workshop.pdf
National Parliamentary Workshop	Denmark	29.05.2020	http://www.energy-efficiency-watch.org/media/pdf/EUFORES-Danish-National-Parliamentary-Workshop.pdf
Interparliamentary Meeting	Finland / EU	22.- 23.11.2019	http://www.energy-efficiency-watch.org/media/pdf/EUFORES-19th-IPM-on-Renewable-Energy-and-Energy-Efficiency.pdf
Interparliamentary Meeting	EU	27.11.2020	http://www.energy-efficiency-watch.org/media/pdf/EEW4-Post-Nov-2020.pdf
Online survey with 1,270 energy efficiency experts	EU	February - June 2020	http://www.energy-efficiency-watch.org/media/publications/EEW4-survey-report.pdf
Workshop at Central European Energy Conference "Energy efficiency in Central and Eastern Europe: narratives and Financing"	Slovakia / EU	18.11.2019	http://www.energy-efficiency-watch.org/media/pdf/ENERGY-CITIES-Workshop-Energy-efficiency-in-Central-and-Eastern-Europe.pdf
EUFORES Breakfast with the Croatian EU Council Presidency: "Political priorities during the Croatian EU Council Presidency"	Croatia / EU	29.01.2020	http://www.energy-efficiency-watch.org/media/pdf/EUFORES-Breakfast-with-the-Croatian-EU-Council-Presidency.pdf
The European Energy Efficiency Conference 2020	EU	04.- 06.03.2020	http://www.energy-efficiency-watch.org/media/pdf/The-European-Energy-Efficiency-Conference-2020.pdf
EUFORES MEP-Meeting with incoming German EU Council Presidency "Priorities of the incoming German EU Council Presidency on renewable energy, energy efficiency and the EU Green Deal"	Germany / EU	16.06.2020	http://www.energy-efficiency-watch.org/media/pdf/EUFORES-MEPs-Meeting-with-the-German-EU-Council%20Presidency.pdf
EUFORES "Embracing the energy transition in an unprecedented context:	Poland	30.06.2020	http://www.energy-efficiency-watch.org/media/pdf/EUFORES-Embracing-the-energy-transition-in-

Event / input type	Geographic focus	Time	Link to documentation
a way to re-think and re-boo(s)t our local economies”			an-unprecedented.pdf
Workshop "The National Energy and Climate Plans & the EU Recovery Plan: The Finnish Green Vision"	Finland	24.09.2020	http://www.energy-efficiency-watch.org/media/pdf/WORKSHOP-The-National-Energy-and-Climate-Plans-&-the-EU-Recovery-Plan-The-Finnish-Green-Vision.pdf
Physical workshop organised in the capital in cooperation with the Hungarian Energy Efficiency Institute (MEHI)	Hungary	07.10.2020	http://www.energy-efficiency-watch.org/media/pdf/Physical-workshop-organised-in-the-capital-in-cooperation-with-the-Hungarian-Energy-Efficiency-Institute.pdf
Romanian Workshop in cooperation with the Romanian municipal network, OER	Romania	28.10.2020	http://www.energy-efficiency-watch.org/media/pdf/Romanian-Workshop-in-cooperation-with-the-Romanian-municipal-network.pdf
EUFORES MEP-Academy "New Narratives to Drive Energy Efficiency in Member States: Insights from over 1,200 Experts"	EU	04.12.2020	http://www.energy-efficiency-watch.org/media/pdf/EEW4-Presentation-Survey-Results-Dec-2020.pdf
Webinar “Financing energy efficient building renovation and supporting narratives”	Hungary / EU	10.02.2021	http://www.energy-efficiency-watch.org/media/pdf/EEW4-ECentral_webinar-AGENDA.pdf
Webinar “EUCF 2nd call announcement & discussing supporting narratives for the energy transition”	Poland / EU	17.03.2021	http://www.energy-efficiency-watch.org/media/pdf/EEW4-EUCF-PL-workshop-AGENDA.pdf
Webinar “Municipal renovation plans and supporting narratives* for the energy transition”	Romania / EU	25.03.2021	http://www.energy-efficiency-watch.org/media/pdf/EEW4-RO-webinar-AGENDA.pdf
Webinar “Delivering on the Renovation Wave: Supporting Narratives & Financing”	EU	27.04.2021	http://www.energy-efficiency-watch.org/media/pdf/EEW4-CoM-Webinar.pdf
Webinar “Municipal renovation plans and supporting narratives* for the energy transition”	Czech Republic / EU	07.05.2021	http://www.energy-efficiency-watch.org/media/pdf/EEW4-CZ-workshop.pdf
Workshop “Supporting narratives* for the energy transition. Energy efficiency workshop in the framework of the Bulgarian Sustainable Energy Investment Forum”	Bulgaria / EU	19.05.2021	http://www.energy-efficiency-watch.org/media/pdf/210519_EEW4_SEIF_BG_workshop_AGENDA_final.pdf
Workshop “The European Green Deal and the National Energy and Climate Plan in Ireland”	Ireland / EU	16.06.2021	http://www.energy-efficiency-watch.org/media/pdf/EUFORES_workshop_Ireland_Agenda.pdf
EU Council Presidency Meeting with Slovenian Energy Attaché	Slovenia/ EU	25.06.2021	Slovenia-Council-Presidency_EEW4-External-Event-Report.pdf (energy-efficiency-watch.org)