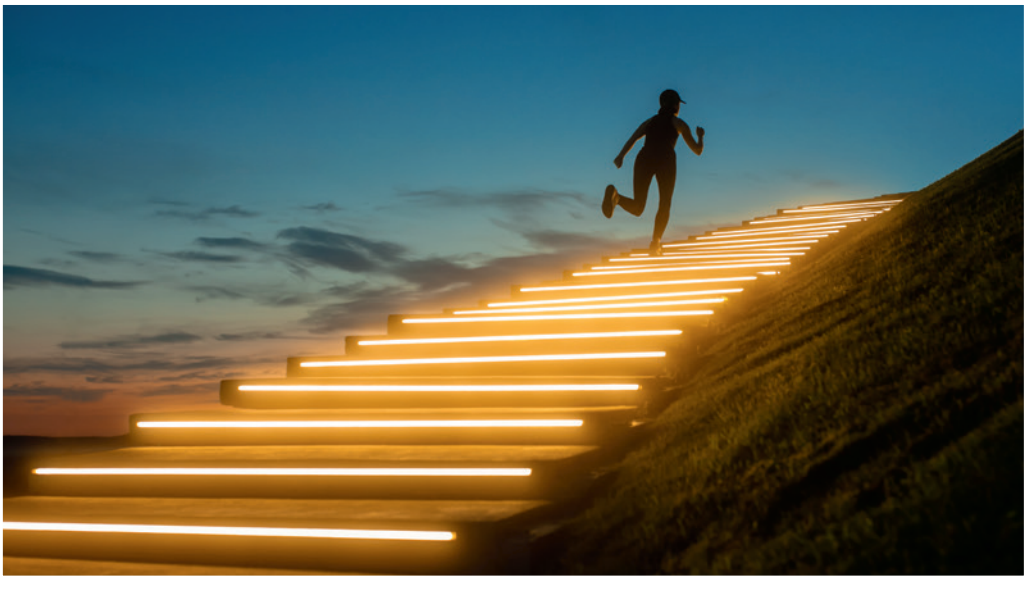
ENERGY EFFICIENCY WATCH

The missing 'why' – how narratives can improve energy efficiency and security in Europe

Key results from the Energy Efficiency Watch 4 project



Funded by the Horizon 2020 Research and Innovation Programme of the European Union

Imprint

Brochure presented by the Energy Efficiency Watch project
Coordinated by

EUFORES AISBL
European Forum for Renewable Energy Sources
Renewable Energy House
Rue d'Arlon 63-65
B – 1040 Brussels, Belgium
Dr. Jan Geiss
Virginia Petetti
Rachelle Hajjar

Based on the input of the energy efficiency expert survey,
national and European parliamentary workshops
and business stakeholder workshops

Guidehouse Germany GmbH
Daniel Becker
Arnold Bruhin
Henrik Schult
Katja Dinges
Dr. Malte Gephart

OÖ Energiesparverband (ESV)
Christiane Egger
Megan Gignac

With contributions by
Nils Borg (Borg & Co / eceee), Jason Erwin (Borg & Co / eceee),
Ylva Blume (Borg & Co / eceee),
Dominique Bourges (FEDARENE), Filip Dumitriu (FEDARENE),
Kristina Dely (Energy Cities)

Brussels, Berlin, Linz, Stockholm, Budapest
June 2022

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 847153.

The sole responsibility for the content of this brochure lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the CINEA nor the European Commission are responsible for any use that may be made of the information contained therein.

Source page 1: Adobe Stock
Graphics: www.digitale-gestaltung.de

Editorial

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

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

As rapporteur on the Energy Efficiency Directive (EED) in the European Parliament, it is my honour and privilege to introduce you to the Energy Efficiency Watch 4 (EEW4) project findings gathered within this brochure.

Energy efficiency is a key factor to reduce the use of fossil fuels and to support the EU's growing climate ambitions. However, not enough attention and urgency has been given to this field, especially in regards to the ongoing energy and climate crises. The International Energy Agency (IEA) predicts that energy efficiency should contribute up to 44% to the necessary greenhouse gas reductions globally. It is thus undeniable that large part of the efforts that we need to make to reach our climate objectives comes from energy efficiency measures. One key answer to the climate crisis, rising energy prices and the energy supply crisis caused by the Russian war on Ukraine is energy efficiency: energy efficiency limits the emissions responsible for climate change, it is good for saving money on energy bills, moreover, every time we increase energy efficiency by 1%, we reduce gas imports by 2.6 %.

The EED encouraged the EU and its Member States to make significant energy savings, but not quite enough to meet the EU's climate action objective of a minimum 55% reduction in greenhouse gas (GHG) emissions by 2030 (compared to 1990 levels) to achieve climate neutrality by 2050. We need a more effective EED and it is my responsibility to steer the revision of the EED so to raise EU's level of ambition on the targets. Looking at the EU's climate targets, the existing energy efficiency goal for 2030 is proving the hardest to achieve. In my view, that is because the EED has not been sufficiently binding. Besides, at the heart of the problem, is a difficulty to communicate effective energy efficiency solutions and to animate more often the public debate. Strong narratives are needed to develop argumentative drivers in public discourses that facilitate the adoption and effective implementation of energy efficiency policies in the EU. That is why it is essential to understand the interdependence of energy efficiency policy implementation and effective narratives.

In this context, EEW4 is extremely significant as it identifies narratives for energy efficiency that resonate in different national or regional contexts by linking the debate to recognised benefits that, beyond energy and costs savings, include aspects such as technological innovation, entrepreneurial competitiveness, job creation, better quality of life and increased resilience against geo-political price shocks - in essence a comprehensive understanding of its contribution to public welfare and overarching economic relevance. The project outcomes help improve the level of communication on energy efficiency. It 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).

All key stakeholders and policy makers in the energy field should read this brochure to develop adequate narratives, case studies and key policy recommendations, which will help increase the degree of successful implementation of policy instruments for energy efficiency.

EEW4 key policy recommendations

Key conclusions from the expert survey

- **Energy efficiency policies: ups and downs continue**
  Overall, disappointing levels of improvement in energy efficiency across policy fields: Member States remain way too slow – new dynamics are lacking! Levels of ambition in policy development and implementation keep fluctuating in many Member States

- **The 'why' is often missing: lack of strong narratives**
  Policy ambition is maintained in a specific country or region despite political changes where a consensus has been reached on "why it should be done" (and not "we must because Brussels tells us so")

- **"It's the economy, stupid"! (quote from Bill Clinton's campaign)**
  More attention needed for the positive economic impacts of energy efficiency on **jobs, industry and competitiveness**

- **Buy-in from important stakeholder groups**
  Lack of ambition is often due to the **opposition of key stakeholder groups**

- **Need for better data on benefits beyond climate protection and cost savings**
  EU data, indicators and quantification of **job and competitiveness impacts** of energy efficiency and the energy transition are needed to help shape the debate

- **Are we talking about the right things? And to the right people?**
  New messages and new stakeholder interactions are needed to **speed up acceptance and participation**

- **An opportunity not to be wasted!**
  Unique opportunity to reposition energy efficiency as a key recovery and energy security strategy – requiring much better **NARRATIVES!**

Key conclusions from the 10 narrative cases[1]

Participation and transparency

An **engaged and well-informed public** is more inclined to actively support ambitious policies.

See also detailed conclusions of:
- Narrative case 1: Communication, dialogue and participation
- Narrative case 2: Independent and transparent data base

Economic aspects

When highlighting the multiple benefits of energy efficiency and the energy transition, **economic arguments need to be in the focus**. A wider and forward-looking perspective on what **economic** means (beyond just accounting for energy savings) is required.

See also detailed conclusions of:
- Narrative case 3: What makes a real business case?
- Narrative case 4: The image of technologies

Connotation of change

Phases of economic and technological change in industrial societies typically come along with **skepticism and fear** (whether to be on the winning or losing side of change), which can significantly delay or even obstruct political reforms. Therefore, success of the energy transition requires a **positive connotation of change** and an according communicative framing. The **nexus between energy efficiency and economic resilience** must be strengthened.

See also detailed conclusions of:
- Narrative case 5: Good to be a front-runner
- Narrative case 6: Energy efficiency as integral improvement of the production cycle
- Narrative case 7: Empowering research and innovation for energy efficiency
- Narrative case 8: Education, training and upskilling

Societal acceptance

Societal acceptance is a **key vector for major transition processes** such as the decarbonisation of the energy sector.

See also detailed conclusions of:
- Narrative case 9: Communicate on price effects and social compensation
- Narrative case 10: Just transition

A remark of the EEW4 project team on recent developments in the context of the war in Ukraine

Starting EEW4, we expected the contribution of energy efficiency to energy security to play a role in our discussions with stakeholders, and had it included in our catalogue of standard questions. To our surprise, the argument did not make it to the top five topics of the survey. In the stakeholder discussions, the resilience of well-functioning markets outweighed the specific benefits to energy security.

We assume that today stakeholders would rank it higher and weigh the argument differently. This does not mean that EEW4 results are outdated, but on the contrary allows for insightful additional conclusions:

- The energy crisis related to the Ukraine war shows that energy efficiency has a high potential for energy security, which has not been taken serious in the past

- This is caused by a structural predominance of the supply side in the perception of what constitutes energy security, and a deep-rooted belief in economically rational behaviour as guiding principle for international energy relations

1 The detailed elaboration of each case study is available at: www.energy-efficiency-watch.org/media/publications/EEW4-D4.4-Compilation_of_final_10_case_studies_external_report.pdf

- In this context, the role of energy efficiency tends to be downplayed to a merely optional add-on
- This over-rating of the supply side in public perception may serve as one explanation for high dependence on single suppliers, while neglecting easy-to-implement measures like increased energy efficiency
- The current situation exemplifies the role of energy efficiency for enhancing energy security
- In its strategic planning, the EU must live up to its "energy efficiency first" principle and must aspire to more ambitious policies and according narratives
- The **EU must show its system advantage by its ability to transition to efficient, secure and sustainable energy systems.**

Overarching policy recommendations:

On aggregated level, the conclusions from the EEW4 survey and narrative cases lead to the following overarching recommendations for policy makers, also in view of the 'Green Deal':

Think and act beyond fragmented traditional policy areas, considering that

- **connotation of change** in the public debate decides about success or failure of the energy transition. To develop the right communicative framing, a cross-sectoral approach must be developed
- **comprehensive policy packages** across sectors and policy areas must be set up, combining for instance energy, education, research & innovation
- **concerted action** between energy policy and key players such as educational institutions, branch associations etc. must be fostered by policy making

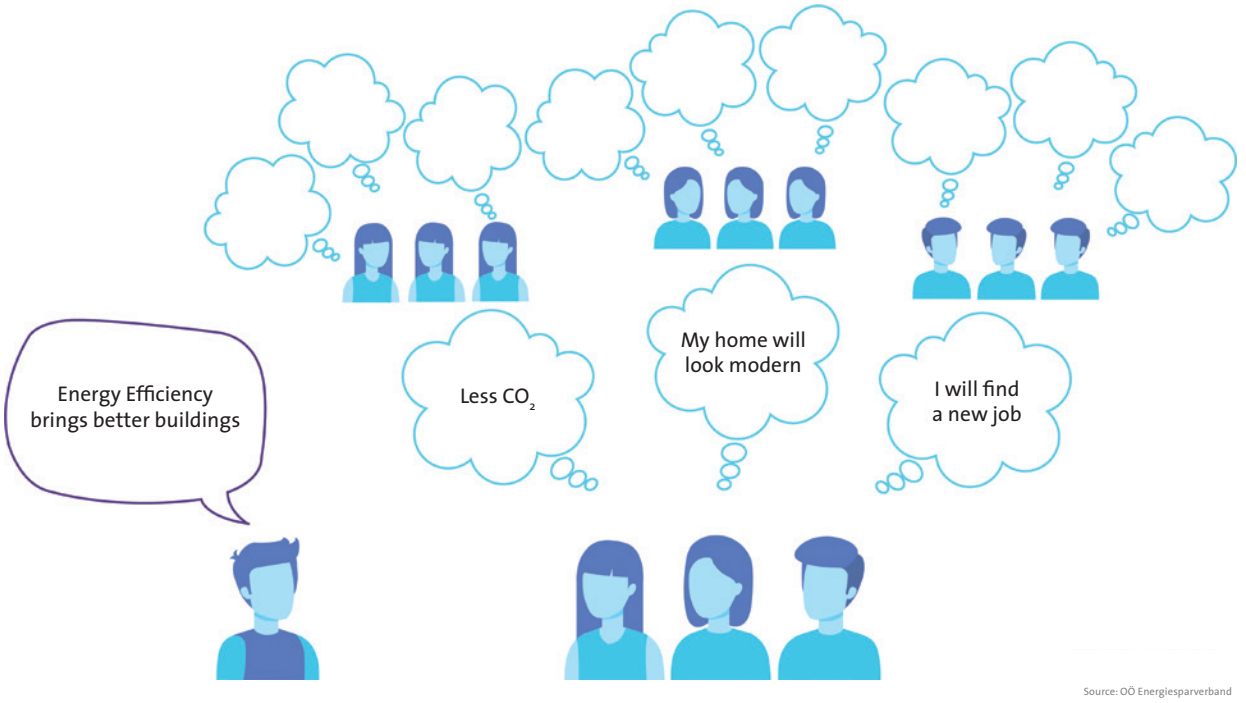
Strategic planning of policy implementation is required from the very start, considering

- **supportive narratives** to flank all new and ongoing policy measures
- **participation and dialogue** for relevant target groups and stakeholders to increase their understanding and potential buy-in

The **economic relevance of energy efficiency** as part of the energy transition must be strengthened, by

- evolvement of **new business models** and **creating favourable market conditions**
- **broader understanding of economic benefits**, and specifically the role that **audits** can play to incorporate their results in the **financial key performance indicators** of companies
- **overcoming** the **predominance of the supply side**, strengthening the synergies with energy efficiency analysing the different target groups' **patterns of economic behaviour** and tailoring policy instruments accordingly
- establishing a **comprehensive definition of its economic dimension**, being a **strong pillar of diversification** and **increasing geo-political resilience**

Narratives: Gaining buy-in from wider groups in society



Source: OÖ Energiesparverband

The Energy Efficiency Watch Survey 2020: Insights from 1,270 energy efficiency experts

The EEW4 survey objectives and approach

A key activity of the EEW4 project was an **extensive survey in which 1,270 energy efficiency experts from all 27 Member States were consulted**. The aim of the survey was twofold: firstly, to gather views of experts and stakeholders on progress "on the ground" in energy efficiency policies in their respective country (similar to the previous EEW surveys carried out in 2012 and 2015). Secondly, to gather insights on key input factors for **narrative development** in Member States.

The survey was carried out between February and June 2020, primarily using an online questionnaire. Participants were mostly from the business and the public sectors, universities and research, and energy agencies. The survey provides an aggregated view of their individual perceptions.[2]

Energy efficiency progress remains much too slow

The first part of the survey was dedicated to gathering views on energy efficiency policy progress in the last 3 years. In order to compare the progress across countries and policy fields, a "progress indicator" was calculated. The results are shown in the table below. In general, a lack of progress can be observed despite the overall much-increased ambition levels. No new dynamics emerged and the levels of improvement in different fields remained very similar to those reported in 2015.

More established instruments, such as energy efficiency requirements for buildings, product labelling and energy certification of buildings are reported to have the highest positive impact whereas energy taxation and the inspection of heating and air-conditioning systems are perceived as least effective. A key outcome of the 2015 survey was confirmed: significant "up-and-down" movements for many Member States are observed. This was often triggered by changes in national governments which resulted in either more or less priority on energy efficiency.

The missing 'WHY': towards new energy efficiency narratives

A key finding of the EEW3 was that the levels of **policy ambition** strongly depend on the existence of **underlying narratives** about the multiple benefits of energy efficiency. Where these are accepted and shared on national or regional level by policy makers, key stakeholders and societal groups, energy

Progress indicators 2020 Ranking – Comparison to 2015

	2020	2015	
Austria	13	5	↓
Belgium	22	13	↓
Bulgaria	13	23	↑
Croatia	11	10	
Cyprus	22	5	↓
Czech Rep.	17	15	
Denmark	**2**	**1**	
Estonia	5	**3**	
Finland	**1**	**2**	
France	19	12	↓
Germany	17	5	↓
Greece	11	24	↑
Hungary	27	26	
Ireland	19	15	↘

	2020	2015	
Italy	7	13	↗
Latvia	13	15	
Lithuania	6	9	↗
Lux	**3**	10	↑
Malta	26	25	
NL	13	19	↗
Poland	24	22	
Portugal	7	21	↑
Romania	24	20	↘
Slovak Rep.	10	15	↗
Slovenia	9	5	↘
Spain	21	28	↑
Sweden	4	4	

2 The detailed survey report is available here: www.energy-efficiency-watch.org/media/publications/EEW4-survey-report.pdf

EU27: Key input factors for narrative development

Topic	Importance in the public debate (ranking)	Topics linked to energy efficiency (ranking)	Positively discussed	Negatively discussed
Jobs	1	6	72 %	28 %
Industrial competitiveness	2	2	63 %	37 %
Modernisation / investments	3	1	44 %	56 %
Housing / living costs	4	3		
Air quality	5	4		
Independence from other countries	6	5		
Rural development	7	7		

Actor group	Influence on politics (ranking)	Supportive of energy transition	Opinion not known	Opposed to energy transition
Associations of large industry	1	47 %	13 %	40 %
Trade Unions	2	37 %	40 %	23 %
Chambers of Commerce	3	52 %	28 %	20 %
Tabloid press	4			
Farmers organisations	5			
NGOs	6			
Churches	7			

efficiency has become an integral part of economic and social policy – instead of "just" a climate policy. If such narratives do not exist, energy efficiency is neglected or controversially debated, leading to a **lack of ambition** or frequent **policy changes** ("ups-and-downs"). Effective and **strong narratives** are therefore needed to further drive the energy transition on Europe's pathway to climate neutrality.

The EEW4 puts the analysis and development of narratives for energy efficiency at the core of its activities. The results of the survey provide inputs for this process on EU level and in each country. In order to be strong and widely adopted, new or strengthened narratives need to resonate with topics of general importance in society and have the support of key stakeholder groups. The data help to focus on topics and actor groups of importance in a country context and identify possible weaknesses in the current debate.

As a first step, the survey looked at **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. In comparison, housing / living costs and air quality, spur much less interest.

To which **topics is energy efficiency currently being linked** in the public debate? Across the EU, it is by far most often discussed in regard to **investments**, followed by its impact on competitiveness, housing / living costs and air quality. The most important topic – jobs – is strongly underrepresented in the public debate. Jobs and competitiveness are mostly discussed with positive connotations, investments rather in a negative manner.

Similarly, understanding which **actor groups** are most influential on politics in a specific country context is an essential element, since effective narratives need wider stakeholder support. Across the EU, **associations of large industry** have by far the strongest political influence, followed by Trade Unions and Chambers of Commerce. The views of the tabloid press, farmers organisations, NGOs and churches are seen as having a much lower impact. The three most influential groups are slightly more supportive of the energy transition than opposed, however, with strong variations across countries.

The following image consolidates the survey results on key input factors for narrative development in EU27. An overview table specific for each Member State as well as further survey results are available in the survey report.

Narrative case 1 – Dialogue and communication

Acceptance among envisaged target groups is key for successful policies. Already at the preparatory stage, 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).

Where administrations actively engage with stakeholders and society on energy efficiency policies, they will generate better understanding of the measures and thus a broader level of acceptance. Even if controversial, stakeholders will likely be more open to compromises when having sufficient insight into the complexity and rationale of policies. For policymakers and administrations, consultation and engagement processes can provide valuable information: Who in relevant stakeholder communities has which interest? Who takes which position? Who is in favour (and under which conditions)? Who is against (and why in particular)? Who might be won over or become an ally? Who is indifferent? etc. All this information helps in devising robust and well-functioning implementation processes.

Meaningful consultation and engagement processes thus facilitate buy-in and acceptance. They provide opportunities for building and popularising inclusive narratives supporting the policy measure at hand, and enhance the quality of policymaking as such.

In the preparatory process for a policy instrument, it is essential to strike 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. 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 becomes likelier, e.g. when developing business cases, taking investment decisions, fostering training and education etc. Formats of stakeholder involvement are e.g. parliamentary hearings and iterative dialogue platforms on impact monitoring and evaluation. Emphasis must be laid on transparency of the procedure towards the public, the selection of stakeholders and the roles in which they act.

Towards citizens on whom, e.g. as end consumers, policies have an impact, it is advised to create maximum transparency at early stage, to create understanding and buy-in. Formats of participation can be moderated stakeholder dialogues, citizens' councils and related engagement processes.

It is beneficial to explore and analyse target groups (e.g. when planning 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 broad entrepreneurial participation (e.g. prosumer models). The citizen involvement process should be flanked through comprehensive and transparent communication into the broader public.

Key conclusions

- Policy implementation works better if **dialogue and participation formats** for relevant stakeholders and target groups exist
- Dialogue and participation **improves the level of information**, helps to **manage expectations**, create potential **buy-in**, form alliances, and allows to use the (potentially supportive) **momentum of civil society**

Source: BMU / Sascha Hilgers

Source: Getty Images

Narrative case 2 – Transparent data generation and use

Availability of independently generated data (economic, environmental, statistical) is key for acceptance of energy efficiency and new energy technologies. Their sources must be made fully transparent, same as how they are processed and used. This enables the public to better understand the technological and economic potential of energy efficiency, both from a cost-benefit and from a macro-economic standpoint. Performance of projects such as successfully achieved and cost-efficient energy savings become visible, and the degree of market deployment can be illustrated in combination with further policy measures and its underlying reasoning.

Traditional energy statistics are typically lacking granularity on the specifics of energy efficiency and renewable energies, thus not allowing for tailored data sets to measure e.g. the competitive progress against conventional energy technologies. They can therefore lead to the unfounded impression that new energy technologies were performing less good than long established conventional generation.

If data are not available in required quality, stakeholders may start using own data that might not be open to independent validation, 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 contextualisation and in some cases even fake 'facts' can create a hostile climate for change. Lack of transparency on data sources makes it hard for the public to develop a well-founded and constructive opinion, even if not per se opposed to the energy transition.

For effective implementation, policy instruments should therefore be grounded on a robust and independently verified process of data gathering for monitoring target achievement and its degree of success. Robust and trusted data should also be used for evaluation and regular adjustment if needed. In a broader sense, these data can also 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. They will also help correcting erroneous or false statements (e.g. non contextualised statements on extreme costs of change) and in the public opinion increase acceptance and trust in the transition processes.

Key conclusions

- Availability of transparent and meaningful data is an established principle in the EU (evidence-based policy making) and provides an essential foundation for narratives (explain targets & functioning principles, measure effectiveness and positive impact of policy instruments)
- On Member State level, the quality of data generation, independent verification and according use in the political debate varies considerably
- More focus is required on the collection of **meaningful data on non-energy benefits** (jobs, innovative momentum etc.)
- The option to **generate specific data from** existing and / or planned **policies** (e.g. on their impact and economic efficiency) is not used sufficiently. It should become a standard component in new policies.

Source: UX Indonesia on Unsplash

Narrative case 3 – Real business case

When the first policy instruments for energy efficiency were created, the expectation was that business cases would gradually develop and become stronger with increasing demand. What in fact was the case for the upscaling of renewable energy often remained very scattered in the more complex field of energy efficiency. Here, viable business cases are not only a function of cost degression of technical solutions but also require a comprehensive level playing field in relation to competing solutions, energy prices, counter-productive subsidies etc., which have often not been addressed to the degree needed. As a result, many energy efficiency business cases have remained niche solutions. To broaden their range, a positive narrative is sometimes built around non-economic 'co-benefits' of energy efficiency (assuming that customers may want to contribute to cleaner air, for instance). However, this well-meant, often altruism-based narrative may in fact achieve the opposite: it frequently contributes to the counter-productive impression of just putting gloss on business cases which were economically not per se convincing.

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 – highlighting again the need for robust and transparent data as illustrated in case study 2. Added value to the client may include convenience, process modernisation, or upgrading a firm brand. This added value should be monetised as much as possible to obtain a comprehensive view on the business case. Any other, non-monetisable 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 a candid, transparent and credible narrative about what the business case is – and what it is not. Eventually, it also adds clarity where political steering is needed for levelling the playing field to enable and strengthen energy efficiency offerings.

Key conclusions

- Policies must ensure that **real business cases** - economically sustainable and expandable - can evolve
- Policy makers must create a level playing field for energy efficiency, e.g. in competition with conventional technologies through price signals, same as to renewable energies by leveraging synergies with efficiency
- Energy efficiency policies must create a favourable environment for specialized firms, able to develop and amplify business cases and realize cost degression through upscaling
- This must be accompanied by a convincing narrative that energy efficiency, despite its comparatively higher complexity, is the new mainstream

Narrative case 4 – Working with the image of technologies

Phasing out inefficient and emission-intensive appliances and technologies is the focus of a significant number of policies and support schemes throughout EU Member States. Significant potential for efficiency gains and related emission reduction can be tapped namely in heating 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 deployed to replace outdated technologies, the image factor can also have a positive impact regarding acceptance and compliance. Tailored communication is therefore 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 well-targeted, clear, and multi-level communication strategy is essential. Socio-economic aspects that affect the decision-making process of the target group need to be considered when devising the communication strategy. Pertinent communication can pursue different strategies:

- Highlighting positive impacts of new technologies, e.g. by speaking to target groups' appetite for high technological standards and a resulting increase real estate value. Further benefits such storylines can 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 needs), but such strategies should nonetheless also refer to the benefits of alternative available technologies as a remedy.

- A specific narrative must be developed where decarbonisation technologies are associated with a prevalent negative image (e.g. economic backwardness etc.), marked not by lack of market maturity or high costs but rather cultural or historical reasons. 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 focused communication strategy. New technologies must be comprehensively appealing e.g. through cost-value relation, safety etc. on the one hand, and convenience, innovation and a modern lifestyle on the other, in order to address different layers of perception effectively.

Source: OOe Energiesparverband

Information campaign 'Goodbye to oil' to replace oil heating systems in Austria.

Source: shutterstock

Key conclusions

- Target groups of energy efficiency policies are heterogeneous and thus have different motivations to act
- It needs to be analysed which groups are relevant for the success of a policy, which specific need and preferences they have, and **what determines their economic behaviour** and willingness to adopt new technologies
- It must be considered where (and which level of) **financial support** leads to the envisaged consumer behaviour, and where a broader set of **image factors** (e.g. **convenience**, **modernity**, **general value of a property**, etc.) will trigger action
- This should be incorporated when setting up new policies or evaluating the success of existing ones, accompanied by appealing narratives

Source: Adobe Stock

Narrative case 5 – Good to be a front-runner

Perhaps the strongest of all overarching narratives is one that builds on societal consensus that **being a front runner** in the energy transition is **in the best 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 from innovation and from being an early adopter of new technologies, thereby enabling strategical positioning on new markets. Where this overall consent is reached, policies are much less likely to fail or become subject to ideological dispute but will be judged pragmatically based on the degree to which they contribute to the overarching modernisation target.

While it can be argued that the preconditions for such societal consensus cannot be created by energy policy alone, we can recognise that gradual approaches have considerable success, too. There are examples for single sectors and specific technologies receiving strong positive connotation, for instance expressed through confidence in their economic potential and thus higher welfare, pride on technological progress, and image building quality e.g. for changing regions. Leveraging themes like these, presenting success stories and 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').

Key conclusions

- It is a strong enabling narrative if a country wants to be front-runner on energy efficiency
- It is worthwhile to identify **why**, in **which area** and by **which concrete measures** a country wants to **become a front-runner** and build supportive narratives around this

Source: Getty Images

Narrative case 6 – Integral improvement of the production cycle

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

Awareness among company leaders and policymakers 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 **improved process efficiency** and **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 should be understood as an integral improvement of the production cycle instead of a purely energy-focussed issue, e.g. in terms of 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 an opportunity to obtain valuable insights on how to modernise the firm's value creation. 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 make them ready for the future on their path towards full decarbonisation.

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 key performance indicators of a company rather than a matter of compliance with environmental regulations. This way the narrative on the relevance of energy efficiency for the production cycle becomes an integral part of the entrepreneurial strategy.

Key conclusions

- Communication on the benefits of energy efficiency must focus not only on the (energy and thus cost-) saving aspect of energy efficiency measures
- The **overarching potential for optimising production processes** must be shown, reducing input of resources and optimizing financial performance
- Policies should strengthen the role of **energy audits**, their results should per default receive management attention
- New narratives must **connotate** energy efficiency with **entrepreneurial success**, **innovation** and **competitiveness**, and with economic resilience, e.g. against geopolitical (availability / price) risks

Source: ThisisEngineering RAEng on Unsplash

Narrative case 7 – Research and innovation

Research and innovation play a key role in the energy transition which is often not fully recognised. Research creates the basis for technological and economic innovation and thus contributes to competitiveness, while also having significant potential to generate impact and become part of a wider narrative for the carbon neutral transformation. If through research and technological innovation new approaches are developed in a country, they can effectively resonate in public debates by providing interesting future pathways and contributions to modernisation. Crucially, research and innovation can help putting into new perspectives traditional patterns of public perception (e.g. not seeing alternatives to established energy generation and consumption) and fear of loss. Depending on the depth of research results, they can form a new narrative supporting the transformation along the lines of: a) change is possible, b) it provides tangible opportunities and c) new opportunities may have the potential to outweigh the impact of declining carbon-intensive industries.

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 gradually opening societies to new thinking. If by contrast there is no such chance for junior staff to get in contact with innovative approaches through research, this may result in a risk of massive lock-in of outdated technologies, thereby undermining the appeal and public support for the energy transformation.

Stakeholders consulted in EEW4 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:

- research and development as fundamental vectors to develop and help popularise the innovations, technologies and processes needed to deliver the transformation;
- 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;
- its elite building function, influencing societal debate on energy efficiency and the 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.

Key conclusions

- The role of technological research and innovation as **agent and promotor of change** in society needs to be understood by policy makers and used for supportive narratives
- This must be leveraged by **comprehensive policy packages** (e.g. energy AND research policies) beyond traditional policy areas

Narrative case 8 – Education, training and upskilling

Acceptance of energy efficiency and new energy technologies is influenced to a large extent by consumers' trust in the competence of planners, builders and installers. This starts with getting the right advice on how to newly build or modernise, making the right choices on best available technologies and building techniques and having installations made and work implemented accordingly. Currently, however, planners and installers whose professional education and training dates back several years or decades, often are not sufficiently familiar with new applications and may thus advise their clients to opt for solutions which are no longer state of the art, also due to concerns of making mistakes. Besides these specific deficits, the general pace of adjustment in upskilling also does not meet the requirements of the energy transition. This is problematic mainly in two ways, namely missed opportunities and lock-in of outdated technology and related carbon emissions, combined with loss of property value on the clients' side on the one hand, on the other in terms of its discursive impact in the context of narratives, i.e. 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 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.

Source: Adobe Stock

Educating and training professionals and future professionals to have the qualifications and skillsets needed to deliver the transformation to climate neutrality is thus a societal task. Planners, builders and installers are also needed 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 upskilling programs, implement curricula for technological qualification and new job profiles in cooperation with educational institutions and relevant industrial branches.

Key conclusions

- 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 all areas where new technologies are professionally applied (and beforehand promoted to customers) must be addressed in **comprehensive policy packages**
- **Alliances** between the **energy sector** and educational or **training institutions** should be formed, together with **branch associations**, ensuring successful rollout and strong narratives

Source: Adobe Stock

Narrative case 9 – Transformation and social justice

The political feasibility of the transformation to the carbon neutral economy depends above all on the acceptance by society. A socially balanced distribution of the transformation's costs and benefits and complementary social policies are essential, especially to ensure the acceptance of carbon pricing as the central instrument at 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 part of energy price increase that is carbon-price-induced. 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 end consumers may not be able to judge to which extent they are compensated, and for which part of excess cost. This is due to the complex composition and externally driven volatility of energy prices. First opinion polls and studies, e.g. from Switzerland, suggest that even when compensation for vulnerable households outweighs the extra burden of the CO_2-tax, consumers still have the perception of being negatively affected.

To make compensation mechanisms work, they need to be accompanied by comprehensive and illustrative information on the price effect of the CO_2-tax and the directly related redistribution. Such narrative element needs to be an essential part of any CO_2 price and compensation policy package to ensure its success.

Key conclusions

- Empirical insights show that monetary compensation under CO_2-tax regimes are often wrongfully perceived as insufficient, mainly due to the **complexity of influencing factors** on energy prices
- If instruments are planned that – such as a CO_2-tax – structurally increase price levels, they must be **flanked from early stage by communication campaigns**
- Especially compensation for vulnerable societal groups must be well communicated: what is the **related price increase** and the **level of support** provided, based on illustrative and transparent economic data

Narrative case 10 – Just transition

The term 'just transition' has become very prominent in the political debate across all Member States from the moment when it became obvious that decarbonisation until mid-century was an inevitable political necessity and would therefore need to be enforced. As a short and catchy slogan, 'just transition' comprises in fact a broad range of associations and statements, which are all closely related to societal acceptance. The emphasis that is laid on the term 'just' in the public debate can be explained 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:

- 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 decarbonsation, also the above order is problematic: first, financial compensation is to be promised, then societal acceptance for decarbonisation can follow.

- 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.

- Whilst the problematic experience dominates the collective memory, the transition processes of past decades have generated valuable insights on a macro-level 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 ongoing and 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 use the opportunities of the green energy transformation. Assets of change must be highlighted better. For instance, industrial regions affected by structural change tend to have good transport infrastructures and an 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.

Source: Adobe Stock

Source: Adobe Stock

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.

Key conclusions

- In the general political debate, the term 'just transition' may easily be **misinterpreted** in a way that (too) large parts of society claim to be on the losing side of transition, leading to a fatal 'race for the highest compensation' (e.g. societal pressure may lead to subsidies for energy intensive consumptive expenses)

- Expected **positive welfare effects** of the transition are structurally underrepresented in the public debate

- Assumed vulnerabilities of societal spheres must undergo a **thorough analysis** before compensation mechanisms are established.

- Investments in transitory measures must have a clear preference over (especially energy intensive) consumptive patterns

- A missing part in the public debate is the '**un-just non-transition**', i.e. the losses of welfare and broader economic consequences of political inaction or inertia, e.g. on **inter-generative justice**

- Communication strategies must therefore **create a better balance** of the currently predominant fear of losses and the economic gains a society and its parts can expect, managing the expectations on a **comprehensive and future oriented 'just' transition**

Methodology and way of working

Building on the experience of Energy Efficiency Watch 1-3, EEW4 goes beyond the traditional approach of analysing policy instruments for their effectiveness. A key finding was that a) energy efficiency targets are not achieved because societal benefit is not sufficiently recognised, and b) that successful implementation of energy efficiency policies depends to great extent on the existence of underlying enabling narrative(s), spurring acceptance among decision-makers, stakeholders and also significant parts of the population. Where such enabling narratives are lacking, energy efficiency is often controversially debated or ignored, leading to frequent changes of policies and unambitious implementation of measures.

Starting points of EEW4:

- Despite the ability to design good policies, **a weak part** is often **implementation**
- An instrument is **as good as you make it**
- **If political will is missing**, the best instrument will fail
- **Changes in the political landscape** result in "ups and downs" in the ambition and implementation if energy efficiency policy is controversially debated
- This does not happen in countries where a "**positive narrative**" has been established, convincing a majority of the public and the stakeholders involved:

  "This is why we want energy efficiency! Let's go for it!"
- Often heard: "we have to - Brussels is telling us" or: "We can't afford ambitious targets", resulting in low own ambition
- **A national narrative** is key, with broad **consensus** independent of political majorities
- **countries, regions and cities** need to develop **their own story**, comprising the multiple benefits of energy efficiency: energy security, job creation, regional added value, health, poverty reduction, technological innovation & industrial competitiveness...

The results of EEW4 were generated through various **input formats**:

- Workshops with Members of the European Parliament and national parliaments
- Workshops with business stakeholders in 10 EU Member States
- EU-wide online survey with >1200 energy experts
- Inputs from European partner networks Energy Cities, FEDARENE, ECEEE (Borg & Co)

The aim of input gathering was reaching out to the broadest possible range of stakeholders to report their experience on energy efficiency policies impacted by narratives. Each of these groups added a different perspective, starting with the guiding question for our analysis:

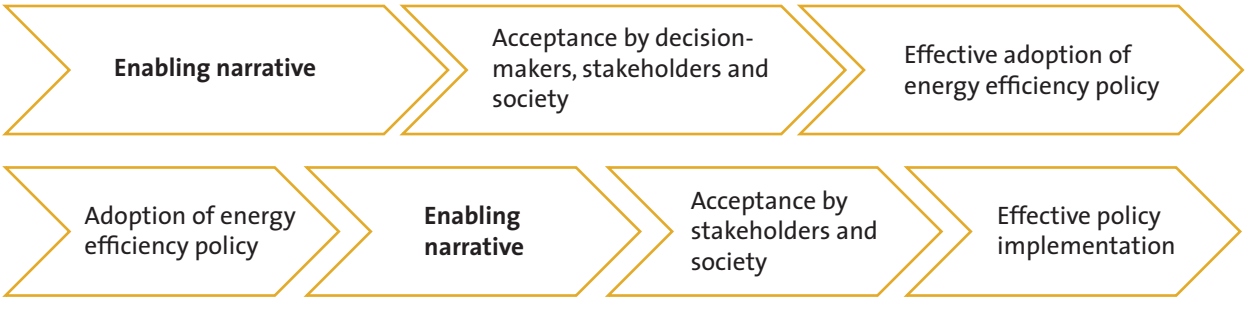
Which narratives enable the effective adoption and implementation of energy efficiency policies in the EU?

The design of the input format was tailored to the respective target groups, asking them from their perspective:

- How come that in your respective context energy efficiency policies were successfully adopted?
- For which reasons initiatives to adopt energy efficiency policies were not successful?
- Which were the factors for successful implementation of previously adopted energy efficiency policies?
- Which factors led to policy failure?

Participants were asked to identify and document key themes and factors to avoid pre-determined interpretations.

Where narratives intervene in the policy cycle (schematic illustration)



Source: Adobe Stock

The electronic version of this brochure can be found on the Energy-Efficiency-Watch website: www.energy-efficiency-watch.org

Key publications

- **Complete expert survey report and report summary including main findings**
- **EEW4 key policy recommendations**
- **10 narrative cases**
- **Final report containing all findings of Energy Efficiency Watch 4**

available on the Energy-Efficiency-Watch website:
www.energy-efficiency-watch.org

Contact:

EUFORES AISBL
European Forum for Renewable Energy Sources
Dr. Jan Geiss
Renewable Energy House
Rue d'Arlon 63 – 65
B-1040 Brussels, Belgium
Tel.: +32 (0) 25 46 19 48
Fax: +32 (0) 25 46 19 34
eufores@eufores.org

http://www.energy-efficiency-watch.org