Carbon Market Watch

Investing in future-proof policies

NATIONAL ENERGY AND CLIMATE PLANS AND THE TRANSITION TO CARBON-FREE SOCIETIES

A civil society guide by Carbon Market Watch

Introduction

In the coming time, Member States will need to develop National Energy and Climate Plans **(NECPs)**, in collaboration with stakeholders, to show how they plan to meet their 2030 climate and energy commitments. This provides an opportunity for civil society to help shape the key national decisions for the next decade and to ensure that they are aligned with the goals of the Paris Agreement.

This guide to NECPs outlines the EU's 2030 climate and energy framework, and specifically the EU's two main climate instruments (the EU's Emissions Trading System and the Climate Action Regulation). It brings forward ideas for input to the NECPs to maximize the low-carbon potential of Europe's two main climate instruments, although the effectiveness of these climate legislations also depends on additional measures being adopted at the national level, and included in the NECPs, to enable the transition to carbon-free communities.

This guide also explains what should be covered in the NECPs, the process for establishing NECPs and the opportunities for civil society and local authorities to input to their development. We hope this guide can help empower actors across Europe to engage in the finalisation of NECPs, in order to ensure that these plans are effective tools for the EU's sustainable transition.

Overview: the EU's 2030 climate & energy framework and NECPs

The EU's 2030 climate and energy framework sets out the targets, rules and governance system in relation to greenhouse gas emission reductions, energy efficiency and renewables. While this overarching framework is important, the actual impact of these targets on driving the transition to net-zero societies will depend on the specific policies adopted by each Member State. These specific policies will be detailed in the National Energy and Climate Plans (NECPs).

The EU's 2030 climate and energy framework sets out three key targets for the year 2030 as a stepping stone to achieving net-zero societies:

1. At least 40% cuts in domestic greenhouse gas emissions (from 1990 levels).
2. At least 32% share for renewable energy.
3. At least 32.5% improvement in energy efficiency.

Several legislative proposals will help the EU and its Member States achieve these targets. In the case of meeting the EU's 2030 climate target, there are two main instruments:

The EU Emissions Trading System **(EU ETS)** covering emissions from the power, industry and aviation sectors. These emissions need to be cut by 43% compared to 2005.

Climate Action Regulation **(CAR)** (formerly known as Effort Sharing Regulation **- ESR**) cover the emissions from the building, transport, agriculture and waste sectors by setting out binding national climate targets. These emissions need to be cut by 30% compared to 2005.

A governance system has moreover been established to help deliver the Energy Union and Paris Agreement. The Governance Regulation sets out the planning and reporting requirements that allow the EU to track if the national actions are sufficient to collectively achieve the above targets.

Under the Governance Regulation, EU countries will need to develop National Energy and Climate Plans **(NECPs)** to show how they plan to meet their climate and energy commitments. The plans will cover ten-year periods, and the first final plans covering the 2021-2030 period will need to be submitted by the end of 2019, and updated after 5 years.

NECPs have the potential of turning the Paris Agreement into tangible actions, act as capital raising instruments and involve citizens and civil society in key issues of the climate transition that will affect us all. Critical decisions will need to be tackled in the NECPs, in relation to e.g. city planning, agricultural subsidies, public transport infrastructure, building renovations and waste collection. These decisions will determine not only how many greenhouse gas emissions will be cut up to 2030, but, most importantly, can also set in motion the transition to carbon-free societies. The experience and expertise of civil society and local authorities on all these issues are important to enable NECPs to fulfill their role as implementation tools of the Paris Agreement.

Overview of the content of an NECP

The first NECP covers the period 2021-2030 bearing in mind the longer-term perspective and consists inter alia of the following sections:

Summary: Overview of the process followed for establishing the NECP
Targets: Description of national climate and energy targets
Policies:

- Description of the planned foreseen policies as well as an overview of investments needed to meet the targets
- Description of the current situation of the 5 dimensions of the Energy Union[1] with already existing policies
- A description of the barriers on delivering the targets related to renewable energy and energy efficiency

Impacts:

- Assessment of the impact of planned policies to meet the targets including their consistency with the Paris Agreement objectives and the long-term strategies
- The macroeconomic and (to the extent feasible) health, environmental and social impact of the planned policies (+methodology)
- Projections for each of the 5 dimensions of the Energy Union to result from both existing and planned policies

NECP timeline and consultation process

The timeline of developing and implementing NECPs is as follows:

By 31 December 2018: Member States prepare and submit to the Commission a draft of the NECP

By 30 June 2019: The Commission may issue recommendations on the draft plans

By 31 December 2019: Member States notify to the Commission their final NECP covering the 2021-2030 period, as well as a summary of the public's views

By 15 March 2023: (+ every 2 years thereafter) Member States shall report to the Commission on the status of implementation of their NECP (*Progress Report*), including progress on reaching the targets, updates on policies and measures, and projections

By 30 June 2023: Member States submit a draft update of the NECP to the Commission or justify that the current plan remains valid

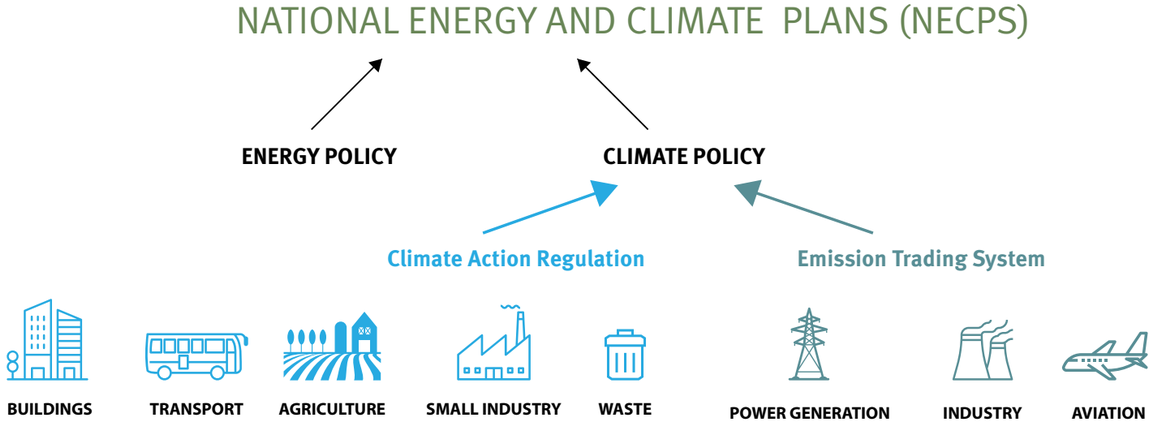
By 30 June 2024: Member States shall notify to the Commission a (final) update of the NECPs unless they have justified that the current plan remains valid

An important element of the development process for NECPs is the active dialogue between all members of society, including local authorities, academia, civil society organisations, the private sector and the general public. The Governance Regulation lays out the ground rules for such process and inter alia includes the following rules for public consultations:

- Member States need to ensure **early and effective opportunities for public participation** in the preparation of the final national climate plans well before their adoption.
- Member States need to make the draft and final NECPs **publicly available**, as well as the NECP Progress Reports, the national projections and relevant assessments of the costs and effects of national policies.
- Member States must set **reasonable timeframes** allowing sufficient time for the public to be informed, participate and express its views.
- Member States need to establish a **Multilevel Climate and Energy Dialogue** where local authorities, NGOs, business, investors and the general public can actively engage and discuss the climate and energy policy scenarios, and review progress. NECPs could be discussed within such a dialogue, but this is not a requirement.

In order to ensure that the transition to net-zero societies through the NECPs truly contributes to a societal shift, opportunities to involve the public should be at least as inclusive as the Governance Regulation lays out. Engaging in a dialogue with all stakeholders is imperative for effective policymaking, to ensure that the measures put forward can count on public support, and to guarantee proper implementation. It is not just an obligation, but a condition to ensuring that communities, local leaders, businesses, and NGOs are engaged in the emission reduction efforts that will affect all layers of society.

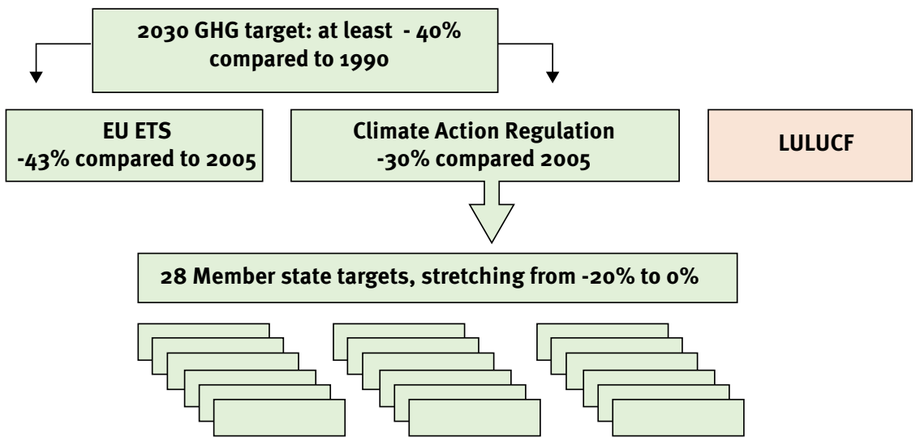
It is equally important that civil society and other stakeholders participate in the process of the development and implementation of NECPs, and actively put forward their expertise and suggestions for measures that enable the shift to sustainable and climate-friendly communities.



Introduction to Climate Action Regulation (CAR)

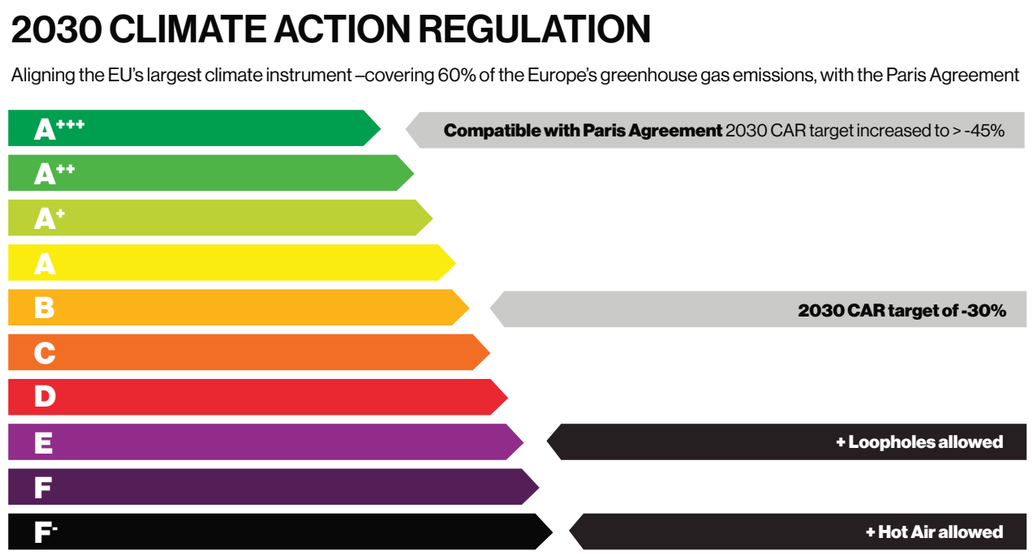
Under the Climate Action Regulation, the EU-wide GHG reduction effort is shared between all the EU Member States. This is done mostly on the basis of a country's wealth as measured by GDP per capita. The wealthiest Member States need to reduce their emissions by 40% below 2005 levels by 2030 and the poorest is allowed to keep its 2005 emissions stable until 2030. These national targets add up to an overall 2030 target of -30% compared to the 2005 emission levels for the EU as a whole.

The CAR covers the emissions from the transport, buildings, agriculture, small industry that don't fall under ETS and waste sectors. The CAR sets an overall GHG reduction target for the sectors it covers, but it does not specify where, how and with what policies a country should reduce its emissions. The choice of measures is therefore the responsibility of each Member State, although existing and new EU policies, such as CO2 standards for cars and trucks and the Energy Performance of Buildings Directive, will help Member States to achieve their targets.



The ESR sets climate targets for each year in the 2021-2030 period, prescribing the amount of greenhouse gases a Member State is entitled to emit annually. This is called the Annual Emission Allocation **(AEA)**. Member States have an obligation to keep their GHG emissions below their Annual Emission Allocations.

To make it less costly to comply with these climate targets, Member States are allowed to make use of different flexibilities, such as borrowing AEA units from following years or trading emission reduction units with each other. Certain flexibility mechanisms, however, undermine the zero-carbon transition of the CAR sectors by allowing more greenhouse gases to be emitted in these sectors up to 2030, thereby postponing climate action. This applies for example to the flexibilities with the EU ETS and the land use sector, and the flexibility that allows the use of pre-2020 surplus. They, therefore, amount to *'loopholes'*.



Explanation of the different loopholes in the Climate Action Regulation

EU ETS loophole
Nine Member States are allowed to use a total of 100 million allowances from the oversupplied EU carbon market to meet their CAR climate targets. Not only would this increase emissions covered by the CAR, but it could also lead to higher overall emissions up to 2030 and leaves countries with lower auctioning revenues.

Land use loophole
All Member States can use a total of 280 million credits from the land use and forestry sector in order to allow more emissions in the CAR sectors. Relying on credits from planting trees is troublesome as these carbon sinks can be reversed at any time when trees are cleared and burned. Emissions from fossil fuels, on the other hand, stay in the atmosphere for centuries.

Hot air loophole (safety net reserve)
Certain Member States may benefit from a total of 105 million extra credits from their pre-2020 surplus provided that the EU as a whole meets its 2030 climate target. This would reward countries lagging behind their 2030 target, risks widening the divergence of per capita emissions in Europe and could stall climate action.

The tale below gives an overview of the required national emission cuts (in Mt CO2e) in the 2021-2030 period as a result of the CAR. The table shows that there can be a big difference between the minimum and maximum emission cuts, with the difference being equal to the maximum amount of loopholes countries can use (still excluding the hot air loophole). Member States hence

have a choice between investing in future-proof policies that enable the zero-carbon transition and achieve maximum emission cuts, or delaying urgently needed action by using the loopholes that have been built into the law.

Recommendations for input to the NECPs:

Member States should not make any use of the CAR loopholes and focus on investing in future-proof policies in order to set in motion the transition to a net-zero transport, building, agriculture and waste sector.
The targets under the CAR are minimum requirements - **Member States should go beyond their CAR climate targets to unlock the benefits associated with the net-zero transitio**n, such as cleaner air, more livable cities, healthier food and warmer homes.

Table 1: Emission cuts in the 2021-2030 period (Mt CO2e) as a result of the CAR

Country	2030 target	Min. emission cuts[2]	Max. emission cuts[3]
Belgium	-35%	53	73
Bulgaria	-0%	-46	-40
Czech Republic	-14%	-35	-28
Denmark	-39%	11	33
Germany	-38%	210	232
Estonia	-13%	-3	-2
Ireland	-30%	13	59
Greece	-16%	-103	-96
Spain	-26%	-67	-38
France	-37%	176	234
Croatia	-7%	-18	-16
Italy	-33%	85	96
Cyprus	-24%	0,04	0,6
Latvia	-6%	-7	-3
Lithuania	-9%	-13	-4
Luxembourg	-40%	18	22
Hungary	-7%	-68	-59
Malta	-19%	-0,25	-0,03
Netherlands	-36%	70	105
Austria	-36	15	29
Poland	-7%	39	69
Portugal	-17%	-50	-44
Romania	-2%	-61	-37
Slovenia	-15%	-6	-4
Slovakia	-12%	-6	-3
Finland	-39%	-2	10
Sweden	-40%	-2	12
United Kingdom	-37%	0	18
Total	**-30%**	**205**	**621**

Introduction to the EU ETS

The EU ETS covers over 11.000 installations from the power generation and manufacturing industry sectors and aircraft operators. It is designed as a 'cap-and-trade' system; it puts a limit (a 'cap') on the total volume of greenhouse gas emissions that certain installations can emit and allows installations to trade emission permits with each other. The system follows the 'polluter pays principle', meaning that the costs of pollution should be borne by those who create it.

The installations covered under the EU ETS receive or buy emission permits, which are called European Union allowances **(EUAs)**. For each allowance, they can emit 1 ton of CO2. The overall cap is reduced each year, which means that less allowances are available and therefore emissions are reduced over time.

Under the EU ETS, emission allowances are **allocated** in two ways: auctioning and free allocation. The default method is auctioning, as this best ensures the efficiency, transparency and simplicity of the system and creates the greatest incentive for clean investments. Auctioning means that companies must buy their emission allowances at an auction. The power sector needs to buy their emission allowances from auctions or from other participants.

Industrial sectors, such as steel, cement and chemicals, on the other hand, get their emissions allowances for free. This is done out of fear that industrial installations might move their production to other countries with less stringent climate policies to lower their production costs. This might increase emissions at the global level and is hence also called **'carbon leakage'**. Industries that are supposedly at risk of 'carbon leakage' are allocated 100% free emission allowances. After 2020, up to 95% of industry emissions are considered at risk of 'carbon leakage'. The remaining industries that are not considered to be at risk, will see their free allocation reduce from 30% to zero by 2030.

Pitfalls of free allocation

To date there has been **no compelling evidence for 'carbon leakage'**. Studies have found that the impact of more ambitious EU climate action on trade would be 'limited'.[4] The Paris Agreement and the worldwide move towards carbon pricing makes 'carbon leakage' extremely unlikely in the future, also without any free allocation.

EU governments lose out on public funds. Free allocation reduces the share of allowances that Member States can sell in auctioning and raise revenues from. This means that these governments lose out on public funds. Heavy industry is set to receive free emission allowances worth up to €170 billion over the next decade under the revised 'carbon leakage' rules. This implies a substantial transfer of money from taxpayers to industry.

Industry is able to make windfall profits. A study CE Delft shows that industry across Europe has earned a €25 billion pollution windfall from 2008 to 2015, as a result of free allocation under the EU ETS. The sum netted by industry over the period is more than 10 times the amount the EU has spent on innovation under the EU ETS.[5]

Free polluting does not give an incentive for industry to decarbonise and invest in innovation. In 2017, for example, industrial emissions rose by 2% and emissions are not projected to go down in the coming years. The result is that certain European industries have fallen behind the global average in carbon efficiency and saw their competitive advantage decrease. Phasing-out free allowances can help give a financial reward for innovation and helps redirect investments.

Over 40% of the total amount of emission allowances will be auctioned in the post-2020 period. The revenues from selling these allowances at auction will be distributed to Member States, except for around 750 million allowances that will be set-aside to finance two funds: the Innovation Fund and the Modernisation Fund. The Innovation Fund, financed through the auctioning of at least 450 million allowances, will be used to incentivize the development of new low-carbon technologies in the power and industry sectors. The Modernisation Fund will be set up to support lower-income countries in modernizing their energy systems and is financed through auctioning 2% of the total number of allowances. Member States should use at least half of the remaining revenues to provide financial support to domestic and international climate action and to promote the just transition. They can also use the **auctioning revenues** to subsidize industry's higher electricity costs as a result of the carbon price.

Since 2011, the EU ETS has suffered from an oversupply of emission allowances due to the economic recession, the inflow of carbon offsets and an inadequate climate target. This has depressed carbon prices: after having traded at almost €30 per ton of CO2 in

2008, the EUA price fell below €3 in 2013 and stayed below €10 until 2018. This is far below the price levels that scientists think are required to achieve the Paris climate goals[1].

Between 2015 and 2018, EU policymakers **revised the EU ETS** to make it fit for the post-2020 period and tackle the surplus of emission allowances that has plagued the system in the past years.

As part of the revision, the linear reduction factor (**LRF**) by which the overall cap is reduced each year, will be increased from 1.74% to 2.2%. This would bring the EU's 2030 climate target of overall 40% greenhouse gas emission reductions in sight, but it is nowhere near consistent with the Paris climate goals. With the 2.2% factor, emissions in the power and industry sectors reach net-zero by 2058 only, while a Paris-compliant pathway requires a phase out of emissions by 2040 (i.e. a linear reduction factor of 4.2%).

The revision furthermore introduced measures to tackle the **oversupply** of emission allowances. The temporary storage for excess allowances, the Market Stability Reserve, will take in 24% of the overall surplus per year until 2023, i.e. double the previously agreed percentage. Excess emission allowances will moreover be annually cancelled from 2023 onwards, which could lead to the cancellation of up to three billion allowances by 2030. Member States will also be allowed to cancel emission allowances associated with the retirement of power plants, so these allowances cannot be used to increase emissions elsewhere or in the future.

As a result of these measures, **prices** under the EU's carbon market have lately risen to €20 for the first time in years, though they are still barely half of what is needed to reach the Paris climate goals. Several governments, including France and the Netherlands, are therefore contemplating the introduction of a carbon floor price. A minimum carbon price would avoid the situation in which polluting is too cheap, could accelerate the shift away from coal and create a tipping point for the phase-out of fossil fuels in other sectors and jurisdictions.

Recommendations for input to the NECPs:

- **Member States should cancel allowances from retired (coal) power plants** in order to create a virtuous cycle in which the lower supply drives up the carbon price, making remaining coal plants economically unviable and accelerating their closure.
- Despite the recent rise, the carbon price under the EU ETS is still far below the damage that pollution causes to societies. **Member States should hence introduce a carbon floor price at the national or regional level** to spur the energy transition and safeguard against future drops in price levels.
- **Member States should use all their auctioning revenues to support more climate action** at the domestic and international level, and to promote the just transition. No subsidies should be provided to encourage the use of high-carbon electricity by industries.
- **Industry should receive an incentive to reduce emissions by phasing out free allowances, and Member States should support industrial innovators** by creating markets for low-carbon products through public procurement, and by reducing the risks and capital costs of net-zero carbon projects.

Engaging with NECPs: potential issues and recommended solutions

The previous sections have provided an explanation of the EU's overall 2030 climate and energy framework, the importance of additional national measures to be detailed in NECPs, and the process and timelines for developing NECPs. NECPs can only be successful tools for the climate-friendly transition if there is broad and effective engagement from actors across the society. However, civil society and other stakeholders can run into certain difficulties when engaging with NECPs. Below we list three problems that might occur in the development of NECPs, as well as possible responses to these situations.

---

1 The High-Level Commission on Carbon Prices (2017) estimated that prices of at least US$40-80/tCO2 are required by 2020 and US$50-100/tCO2 by 2030, see here

1. My government is late with drafting its NECP

Member States need to develop their draft NECPs by the end of 2018, and submit their final NECPs by the end of 2019. That basically means that governments should start drafting their NECPs immediately, if they have not already done so.

It might happen that your government is late with drafting its NECP. Ideally this does not happen, but if for whatever reason a country fails to develop and submit its NECP in time, there are certain actions that could be taken:

- Write to your government representatives to ask about the status of the (draft/final) NECP development, and the opportunities for public participation, pointing out the requirements of the Governance Regulation.
- Build a coalition with other groups to put pressure on the government to develop the NECP, e.g. investors, trade unions, health organizations, progressive businesses, consumer groups, youth organisations and local authorities. The NECP is a detailed plan of action for the coming decade and multiple groups will have an interest in the timely development of such a climate and energy plan to guide investments and prepare for the transition.
- If the above does not work, write to the European Commission (directly or via Members of the European Parliament) to make EU officials aware of the delays in the development of the NECP and to request follow-up action. Seeking legal action can also be examined.

2. There is no (adequate) public consultation

The Governance Regulation sets out binding requirements for public consultations on NECPs that need to be followed. However, countries might not adhere to these rules and fail to establish a proper stakeholder consultation that is comprehensive, timely and makes the necessary documents publicly available. If this is the case, and if the above actions under situation 1 have not worked, an alternative NECP could be developed and launched.

The development of an alternative NECP allows you to indirectly put forward suggestions for the NECP, even if a formal consultation process is lacking. An alternative NECP can be developed in collaboration with other stakeholder groups, such as local authorities, progressive businesses, investors and trade unions, to demonstrate multi-level support for the measures put forward in the alternative plan.

An accompanying media strategy to launch the alternative 'citizen-centered' climate and energy plan helps to generate public exposure and support for the suggested measures and can add additional pressure on the government to take the suggestions on board in the development of the NECP.

Using alternative NECPs to influence policy: the example of Legambiente in Italy

In December 2017, the Italian government adopted a revised National Energy Strategy (NES) to pave the way for the design of the new NECP, first draft of which is due by December 2018. In order to positively influence the reviewed NES, leading Italian environmental organization Legambiente, produced an alternative version of the energy strategy proposed by the government. The "shadow National Energy Strategy", as Legambiente calls it, used the same model utilized in the official NES, and showed that more ambitious targets were both technically and economically feasible. Thanks to this contribution during public consultations, the Italian government set earlier targets for phasing out Italian coal power plants, moving up the deadline to 2025 instead of 2030, as initially proposed.

A taskforce of experts from the Ministry of Environment and Economic Development, coordinated by the Prime Minister cabinet, is currently working on the first draft of Italy's NECP. A public consultation is envisaged to take place before the adoption of the plan. "*Building on the positive experience of the NES revision, we are now preparing to contribute to the next public consultation on the NECP*", according to Mauro Albizio (European Affairs Director, Legambiente). In order to do so effectively, Legambiente is working on an alternative NECP and building a High Ambition Coalition - a joint platform in collaboration with other environmental/social NGOs, proactive businesses and local authorities aimed at forming a broad alliance in support of an ambitious NECP. Furthermore, Legambiente is planning to use awareness campaigns such as «Comuni Rinnovabili (Municipalities for Renewables)» and "Civico 5.0 (Energy efficiency in buildings)" to raise citizens pressure on the government to step up climate ambition.

With the help of these actions, Legambiente sets out to demonstrate that through a concrete and ambitious NECP, Italy has the potential to achieve greenhouse gas emission reductions of at least 55% by 2030 and achieve full decarbonization by 2040.

3. The NECP is too technical / I don't know how to input

The measures and projections in NECPs can be quite technical and detailed, which can make it seem cumbersome and difficult to input into the public consultation. This should however not act as a disincentive for participating in the NECP consultation with more qualitative analysis of outputs and process.

In essence, an NECP needs to outline the plan for the next decade to put countries on track to meeting the Paris Agreement goals. It should hence show what measures the country is planning to future-proof the society, and the impact of these measures in terms of emission reductions, as well as the health, economic and social impacts.

The plans should include measures related to city planning, food consumption, public transport and cycling infrastructure, building renovations, waste collection and forestry management. These plans will therefore affect investments, behaviors, travel styles, working environments and the way we produce and consume goods. Input by civil society, local authorities or other stakeholders on these issues is critical if these plans are to be successful in managing the climate-friendly transition.

Read more

European climate policy guide: Vol 1 – EU ETS:
https://carbonmarketwatch.org/publications/european-climate-policy-guide-vol-1-eu-ets/
European climate policy guide: Vol II – EU Effort Sharing Regulation:
https://carbonmarketwatch.org/publications/european-climate-policy-guide-vol-ii-eu-effort-sharing-regulation/
EU Climate Leader Board – Where countries stand on the Effort Sharing Regulation:
https://carbonmarketwatch.org/publications/eu-climate-leader-board-where-countries-stand-on-the-effort-sharing-regulation/
Practitioner's guide for local stakeholder consultation – how to ensure adequate public participation in climate mitigation actions:
https://carbonmarketwatch.org/publications/practitioners-guide-for-local-stakeholder-consultation-how-to-ensure-adequate-participation-in-climate-mitigation-actions/
Understanding the Climate Action Regulation:
https://carbonmarketwatch.org/publications/understanding-the-climate-action-regulation/Cities at the forefront of climate action: https://carbonmarketwatch.org/publications/cities-forefront-climate-action/

1 Energy security; the internal energy market; energy efficiency; decarbonisation; and research, innovation and competitiveness

2 Minimum emission cuts (Mt CO2e): assuming countries make maximum use of the different loopholes.
No use of the 'hot air' loophole was assumed.

3 Maximum emission cuts (Mt CO2e): the difference between the climate targets under the CAR and a business-as-usual scenario (EU 2016 Reference Scenario). Red figures indicate that emissions are allowed to increase compared to business-as-usual

4 LSE (2015) found that even in a scenario of full auctioning and a carbon price of €50-100/tCO2, the trade impact would be 'limited', as exports would fall by merely 0.5% and imports would increase by 0.07%. LSE (2015), Asymmetric industrial energy prices and international trade, see here.

5 Carbon Market Watch (2016), Industry windfall profits from Europe's carbon market 2008-2015, see here

Supported by:

Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

European
Climate Initiative
EUKI

based on a decision of the German Bundestag

Contact information:

Agnese Ruggiero, agnese.ruggiero@carbonmarketwatch.org
Femke de Jong, femke.dejong@carbonmarketwatch.org

This project action has received funding from the European Commission through a LIFE grant. The content of this section reflects only the author's view. The Commission is not responsible for any use that may be made of the information it contains.

The project 'Delivering the EU-2030 and long term climate objectives in Central, Eastern and Southern Europe, with a special focus on transport' is financed by the European Climate Initiative (EUKI). EUKI is a project financing instrument by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). Its implementation is supported by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

It is the overarching goal of the EUKI to foster climate cooperation within the European Union in order to mitigate greenhouse gas emissions. It does so through strengthening cross-border dialogue and cooperation as well as exchange of knowledge and experience.