More national climate policies expected, but how effective are the existing ones?

In 2019, EU Member States reported that they had already adopted or were planning to adopt 1925 national policies and corresponding measures to reduce greenhouse gas emissions and achieve climate targets. Many of these measures also help achieve energy efficiency and renewable energy targets. While climate action is clearly taking place across Europe, EU Member States still provide insufficient evidence of the effectiveness and costs of their policies. This briefing presents an overview of the information on national policies and measures for climate change mitigation, reported in 2019 by Member States to the European Environment Agency (EEA) under the EU Monitoring Mechanism Regulation.

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Key messages

- The number of national policies and measures reported by Member States to reduce greenhouse gas
 emissions increased by around 27 % between 2017 and 2019. Most of the new reported policies and
 measures are at the planning stage.
- This increase is consistent with the reported increase in emission savings expected by 2030. It also reflects the
 preparation of National Energy and Climate Plans, designed to achieve the EU's 2030 climate and energy
 targets. However, the number of national policies and measures reported by a country is not necessarily
 related to its level of ambition.
- The information reported on national policies and measures is better and more complete than in previous
 years, in particular on the greenhouse gas emission savings expected from these measures (ex ante).
 However, quantitative information on the emission savings actually achieved by implemented measures (ex
 post) remains insufficiently reported.
- In 2019, most of the reported policies and measures were regulations or economic instruments targeting energy supply or energy consumption (including for transport), implemented in response to one or several EU policies. More than 10 % of the measures concern agriculture. However, few of these agricultural measures (18 %) are presented with associated emission savings.

In 1992, under the United Nations Framework Convention on Climate Change (UNFCCC), developed countries committed to adopting national policies and taking corresponding measures on the mitigation of climate change. Under the 2015 Paris Agreement, all countries committed to pursue domestic mitigation measures in order to achieve the objectives of their nationally determined contributions.

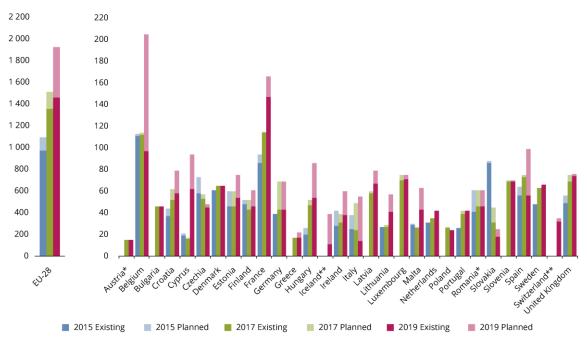
A more detailed analysis is available in the report <u>Overview of reported national policies and measures on climate change mitigation in Europe in 2019</u>, prepared by the European Topic Centre on Climate Change Mitigation and Energy (ETC/CME). Detailed information on <u>policies and measures</u> introduced by European countries to reduce greenhouse gas emissions and to achieve climate change and related energy targets is also available.

Many planned policies reported across Europe

In 2017, EU Member States had reduced their emissions by more than 22 % below 1990 levels. According to their own projections, Member States expect that current policies and measures can deliver a 30 % reduction by 2030, compared with 1990, while planned additional policies and measures could deliver a 36 % reduction by 2030.

In 2019, Member States reported more existing measures and a significantly larger number of planned policies and measures than in 2017 (Figure 1). This increase in the number of reported policies and measures reflects the preparation and finalisation of National Energy and Climate Plans, which lay out how Member States plan to achieve their respective objectives under the five dimensions of the Energy Union and Climate by 2030. Not all of these additional policies and measures are clearly defined yet and many are still to be implemented as reported.

Figure 1 Total number of existing and planned policies and measures reported in the EU-28 (left) and by country (right)



Notes: *2017 reporting, ** non-EU countries

Source: CDR uploads for obligation 'National policies and measures (climate change mitigation)' provided by ETC/CME, 2019

Most often-reported measures are economic and regulatory instruments targeting energy emissions in response to EU legislation

Of the 1 925 climate change mitigation policies or measures reported by Member States in 2019:

- most primarily target energy-related greenhouse gas emissions (which represent 80 % of all greenhouse gases emitted in the EU). Reported measures commonly address energy efficiency in buildings (18 %), renewable energy deployment (16 %), switching to low carbon fuels or electric vehicles (8 %) and the energy efficiency of vehicles (7 %).
- most correspond to economic policy instruments (e.g. subsidies or feed-in tariffs, 44 %) or regulatory instruments (e.g. energy efficiency standards, 43 %).
- many (25 %) were implemented in the 5 years following the adoption of the 2009 climate and energy package (i.e. between 2010 and 2014).
- the number of agricultural policies and measures showed a relatively large increase between 2017 and 2019, compared with other sectors. In 2019, Member States reported 212 agricultural policies having effects on greenhouse gas emissions. Most (72 %) were implemented in response to the <u>EU's Common Agricultural Policy</u>. The most reported objectives are the reduction of fertiliser/manure use on cropland (38 % of all agricultural policies and measures) and improved animal waste management systems (30 %).

The adoption of national policies and measures is also driven by EU legislation. According to Member States, their national policies are mostly related to the 2009 <u>Renewable Energy Directive</u>, the 2012 <u>Energy Efficiency Directive</u>, the <u>Effort Sharing Decision</u> (setting national targets for emissions from the sectors not covered by the EU Emissions Trading System), the 2006 <u>Energy End-use Efficiency and Energy Services Directive</u>, and the 2010 recast of the <u>Energy Performance</u> of Buildings Directive.

A total of 27 % of reported national actions are not directly related to a specific European Union policy. Information on the individual policies and measures is available in an <u>online data viewer</u>.

Information on policy effectiveness has improved but remains insufficient, especially concerning the real effects of existing measures

Qualitative information on policies and measures helps to understand better the nature of climate actions at national level. However, additional information on the effects of these actions is needed to help identify successes and failures, and to provide a key knowledge base to inform policy decisions. This is why Member States must also report, where available, quantitative information on the greenhouse gas emission savings achieved by, or expected from, the reported policies and measures, either individually or for groups of policies and measures.

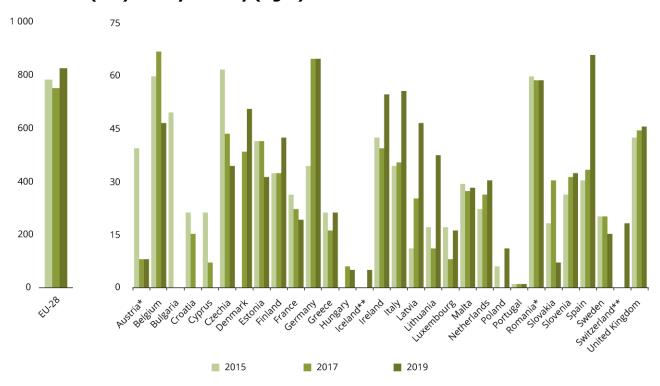
The quality of the information reported in 2019 improved in terms of its completeness, consistency, accuracy and transparency, compared with reporting in 2017. However, quantitative information on achieved, ex post policy evaluations, costs and benefits, and indicators remains underreported.

Reporting of expected effects from new policies

The reporting of expected, ex ante effects of policies improved in 2019 compared with 2017 but remains insufficient. 23 Member States reported some information on expected emission savings. The number of policies with such effects differs significantly, from one in Portugal to more than 60 individual policies and measures in Germany and Spain. In total, Member States reported ex ante savings for 2030 for 500 national policies (Figure 2).

While quantitative data on reported ex ante emission savings from national policies might not be complete, combining reported data does give an indication of important overarching trends. National policies linked to EU policies on the promotion of renewable energy and legislation related to improvements in energy efficiency are expected to deliver the largest emission savings by 2030 (Figure 3). Of all European Union policies, these were also reported most often as the principal reason for the implementation of national policies and measures. However, there are exceptions to this rule. The <u>F-gas regulations</u> have not been linked to many national policies, yet the impact these policies have on emission savings is relatively high. On the other hand, there are many national policies and measures that have been implemented as a result of the Common Agricultural Policy, yet the reported impact of these was relatively small (4.7 Mt CO₂e in 2030). Agricultural policies are rarely quantified (only 18 % of single policies and measures affecting the agricultural sector have at least one quantitative estimate of expected emission savings).

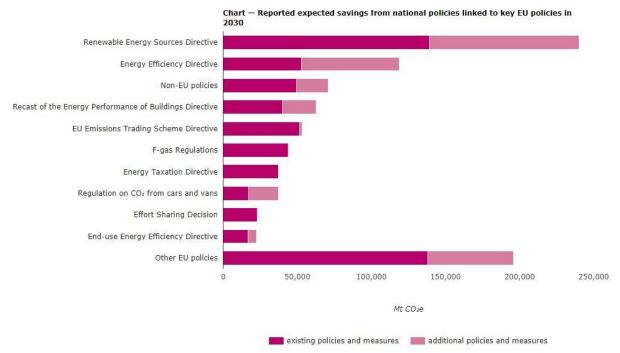
Figure 2 Total number of policies and measures with ex ante savings reported in the EU-28 (left) and by country (right)



Note: *2017 reporting, ** non-EU countries

Source: CDR uploads for obligation 'National policies and measures (climate change mitigation)' provided by ETC/CME, 2019

Figure 1 Reported expected savings from national policies linked to key EU policies in 2030

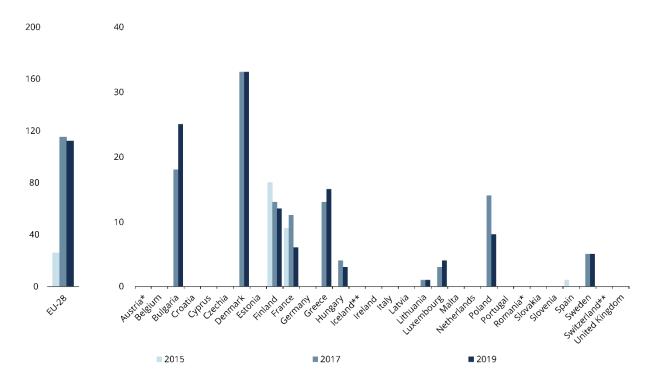


Note: Only EU-28 countries included; for Austria and Romania, reported 2017 information was used. **Source:** ETC/CME. CDR uploads for obligation 'National policies and measures (climate change mitigation)'

Reporting of ex post evaluation results

In 2019, just 10 Member States (Bulgaria, Denmark, Finland, France, Greece, Hungary, Lithuania, Luxembourg and Poland) reported information on the ex post emission reductions achieved, and for only 112 single policies and measures (8 % of all policies reported) (Figure 4). This does not allow for a comprehensive analysis of the impacts of existing national climate policies across the EU and makes comparing and summing up to ex post emission savings a highly uncertain exercise.

Figure 4 Total number of policies and measures with ex post savings reported in the EU-28 (left) and by country (right)



Note: *2017 reporting, ** non-EU countries

Source: CDR uploads for obligation 'National policies and measures (climate change mitigation)' provided by ETC/CME, 2019

The low numbers also highlight the need for Member States to increase efforts to assess the effects of their implemented policies more systematically. The low level of quantitative information reported can be explained partly by technical reasons. For example, Member States do not use common evaluation approaches and methodologies, and may use different assumptions or find it difficult to separate the effects of individual policies from others. In addition, some policy-makers may prefer to focus on new proposals and are often not very interested in communicating the actual effects of past actions.

Detailed and transparent information on national policies and measures is essential to track climate action at national and EU levels. Additionally, policy evaluation plays a crucial role in policy processes, for example, by allowing policy-makers to assess the contribution of specific policies to the achievement of climate mitigation objectives, and to understand success factors and obstacles to policy implementation. Further efforts on reporting and evaluation activities are considered important in the support of climate policy. The new EU Regulation on the Governance of the Energy Union and Climate Action is expected to facilitate the streamlining and integration of the reporting of climate and energy policies and measures, and of their effects.

The EEA will complement the online database of policies and measures with a catalogue of evaluations of environment and climate policies, which will be made available online in 2020.

More information

- ETC report <u>Overview of reported national policies and measures on climate change mitigation in Europe in 2019</u>
- EEA thematic page for climate policies and measures https://www.eea.europa.eu/themes/climate/national-policies-and-measures
- Information on the Policies and Measures reported by Member States in the <u>EEA's online data viewer</u>(statistics) and the <u>EEA's online database</u> (details on individual policies).
- Summary of the information on the Policies and Measures reported in 2017 in the EEA briefing <u>Tracking climate policies in European Union countries</u>.

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