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Commentary

Climate Change Mitigation in the EU - Stepping Up Efforts to Reduce Emissions and Meet the Paris Agreement

DBRS Morningstar

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Adriana Alvarado
Vice President
Global Sovereign Ratings
+44 (20) 7855 6647
adriana.alvarado@dbrsmorningstar.com

Gordon Kerr
Senior Vice President
Head of European Research
+44 (20) 7855 6667
gordon.kerr@dbrsmorningstar.com

Europe is set to intensify its efforts in the coming years to meet its commitment under the Paris Agreement, an international treaty adopted in 2015 to combat climate change. Likewise, at DBRS Morningstar, we will also be continuing our efforts to outline where environmental factors play a role in credit ratings.

The European Union (EU) has agreed to increase its 2030 climate target to reduce greenhouse gas emissions, and expects to legislate its climate neutrality objective in 2021. In December 2020, European leaders agreed on a more ambitious target to reduce greenhouse gas emissions by at least 55% by 2030 compared with 1990 levels, up from the current target of a 40% reduction, as presented in the European Green Deal. Additionally, EU environment ministers reached an agreement on the European Climate Law, which aims to make the EU's 2050 climate neutrality target legally binding.

Since reducing global greenhouse gas (GHG) emissions will require substantial investment, from both the public and private sectors, at the EU and national levels, in addition to strengthening its climate policy framework, the EU plans to make significant green investments over the next years and facilitate sustainable finance. According to the European Commission (EC), achieving the 2030 climate objectives would entail additional investments of close to EUR 260 billion a year by 2030.

Climate finance initiatives, such as the launch of European Green bonds, and the ongoing use of sustainable finance, and other responsible funding initiatives are all likely to support the growth of ESG funding in 2021. DBRS Morningstar is prioritising initiatives in these areas, and to provide clarity on environment, social, and governance (ESG) factors across all rating groups. We recently published a request for comment on a proposed new criteria, where ESG factors are considered in the ratings process.

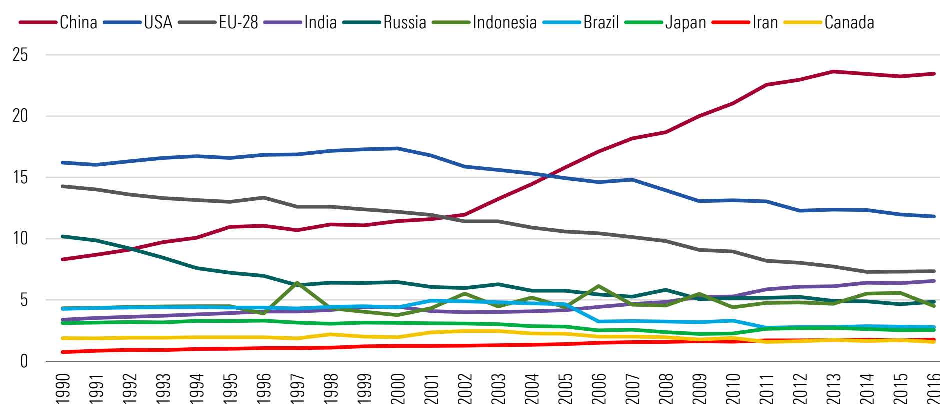
In this commentary, we will examine the EU's current Climate Change Mitigation policies, potential policy proposals, and some potential credit risk implications associated with policy changes.

The Pathway to Emission Reductions

The EU currently accounts for about 7% of GHG emissions, well below the world's largest emitters – China (24%) and the U.S. (12%) (see Exhibit 1). Since adopting its first climate targets in 1990, the EU has become a worldwide leader in the efforts to reduce GHG emissions, that is climate change mitigation. GHG emissions in the EU fell by 26% from 1990 to 2019, according to the European Environment Agency (EEA). Emissions in 2020 are likely to have declined markedly in 2020, with the International Energy Agency forecasting an 8% drop in global emissions - the lowest level since

2010, mainly because of shutdowns and lower levels of economic activity resulting from the Coronavirus Disease (COVID-19) pandemic. Further effort is needed. Under current and planned policies, the EEA has indicated that the EU would reduce GHG emissions by 36% by 2030 from the 1990 level. The emission reduction path to climate neutrality would be even more challenging.

Exhibit 1 Top 10 Greenhouse Gas Emitters (% share of global GHG emissions)



Sources: Our World in Data and DBRS Morningstar. Notes: Inclusive of total GHG emissions – from carbon dioxide (CO_2), methane, nitrous oxide, and F-gases – including land-use change and forestry. Emissions from land use change can be positive or negative. CO_2 is the main greenhouse gas.

To help achieve its more ambitious climate objectives, the EU is currently looking to strengthen its climate policy framework, including carbon pricing in the EU, among other policy instruments. As it stands, the current EU climate policy framework is not conducive to achieving climate neutrality. The EC intends to make specific climate policy proposals by June 2021. The EU is also planning to make significant investments to support the transition to a greener, more sustainable economy.

Potential Credit Risks Associated with Climate Change Mitigation

DBRS Morningstar views the EU's strong commitment to climate change mitigation as positive, presenting an opportunity for a more sustainable European economy. However, we also note some potential credit implications from transition risks, particularly from stricter climate regulations in the EU. For example, changes in regulations could ultimately result in some stranded assets. Nevertheless, new asset classes could be further developed and new ones created.

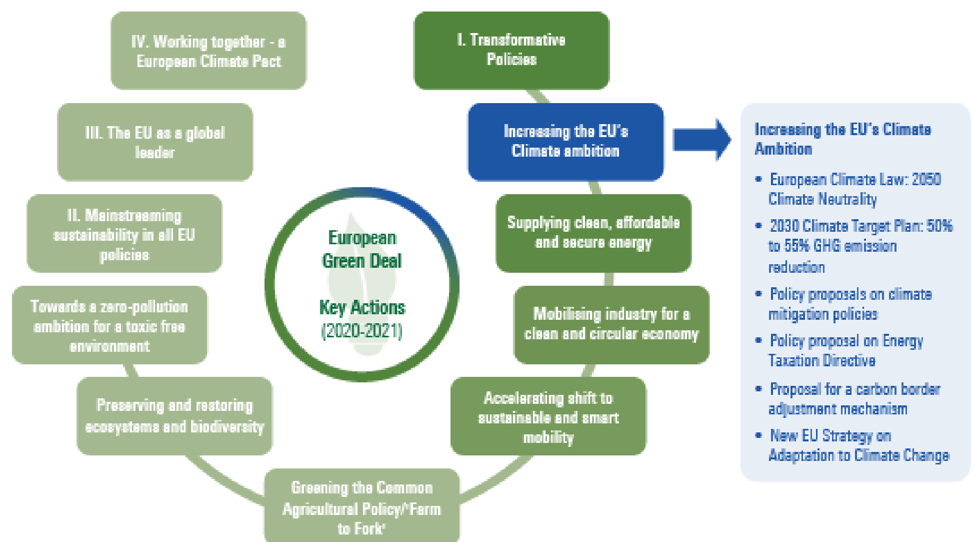
DBRS Morningstar has developed an ESG assessment framework that encompasses up to 17 ESG risk factors that DBRS Morningstar currently considers in its rating analysis for corporates, financial institutions, structured finance and sovereigns. The framework includes five environmental factors. Please see *DBRS Morningstar's Approach to Environmental, Social, and Governance Risk Factors in Credit Ratings*, published on 10 March 2020, for more information.

Stricter Climate Targets Are Being Put in Place

The EU is planning to increase its efforts to reduce its GHG emissions further. The EU's current commitment is to reduce GHG emissions by at least 40% by 2030 compared with its 1990 level. It was set in 2014 in line with the long-term EU objective to achieve GHG emission reductions of 80-95% in 2050. However, in 2019, the EU adopted the long-term EU objective of climate neutrality by 2050. The EC thus set up a more ambitious climate action plan in the European Green Deal, presented in December that year.

The **European Green Deal** is the EU's growth strategy for a sustainable economy, with a roadmap to achieve net zero GHG emissions in 2050. An increased climate ambition for 2030 and 2050 is at the top of the first pillar of the deal – the transformative policies (see Exhibit 2). The first two key climate action initiatives – the European Climate Law and the 2030 Climate Target Plan – could have significant environmental policy implications.

Exhibit 2 The European Green Deal and the EU's Climate Ambition



Source: The European Commission.

European Climate Law

The European Green Deal recommended to make the 2050 net-zero GHG emissions target legally binding. The EC then formally proposed the European Climate Law in March 2020. Following agreement from EU environment ministers, the European Climate Law went to European Parliament, where it is currently being discussed. The purpose of the law is to ensure that all EU policies, and also all sectors of the economy, contribute to the goal of climate neutrality.

2030 Climate Target Plan

The EC also proposed the "2030 Climate Target Plan" to further cut GHG emissions by 55% by 2030 relative to the 1990 level. It was presented as a necessary step to achieve the EU 2050 target, because the current 2030 target of 40% would make the emission reduction path to climate

neutrality very challenging. The proposed intermediate 2030 objective and the climate neutrality target by 2050 are both in line with the Paris Agreement's goal of limiting global warming to well below 2° Celsius above preindustrial temperatures and making efforts to keep it to 1.5° Celsius. In September 2020, the EC proposed to include the new 2030 target into the Climate Law Regulation. And in December 2020, in the last EU summit of the year, the EU leaders approved the proposed target of a net reduction of at least 55% in GHG emissions by 2030, and requested this new target to be reflected in the European Climate Law. The final step is the approval by the European Parliament, expected in 2021.

Some European countries have already committed to a 2030 objective at the national level and have made it into law. For example, the German government made binding the reduction of GHG emissions by 55% by 2030, under its Climate Action Act and its Climate Action Programme 2030 adopted in 2019. We see this as a major step, as Germany is the sixth-largest carbon emitter in the world, accounting for 2% of total global emissions – behind China, the US, India, Russia, and Japan – and the largest emitter in the EU.

Mitigation Efforts Will Intensify Over the Next Decade

By enshrining the climate-neutrality target into law and setting a stricter climate objective by 2030, the EU will have to step up its efforts to reduce emissions significantly over the next decade. Under the current climate targets and policies, the EC has estimated that the reduction in GHG emissions from the 1990 level could be around 60% by 2050, well below the climate neutrality target. Given this potential gap, the EC has prepared an Impact Assessment on the increased reduction in emissions to 50%-55% by 2030 from the current 40%. The Impact Assessment looks at various scenarios on how the net-zero GHG emissions target by 2050 can be achieved, and presents a set of actions required and some policy options. The EC completed the Impact Assessment in September 2020, paving the way for adjusting the current climate policies.

To meet the climate targets, the EC is already looking to strengthen its climate policy framework. The EC is currently reviewing various policy instruments, including a potential extension of the emission trading system to additional sectors, which could strengthen carbon pricing in the EU. Moreover, the EC is exploring a carbon border adjustment mechanism to help avoid a rise in emissions outside the EU that could result from higher carbon prices in the EU – known as carbon leakage, something to which the steel industry, for example, is vulnerable. To prepare the policy reviews, the EC launched four public consultations in November 2020:

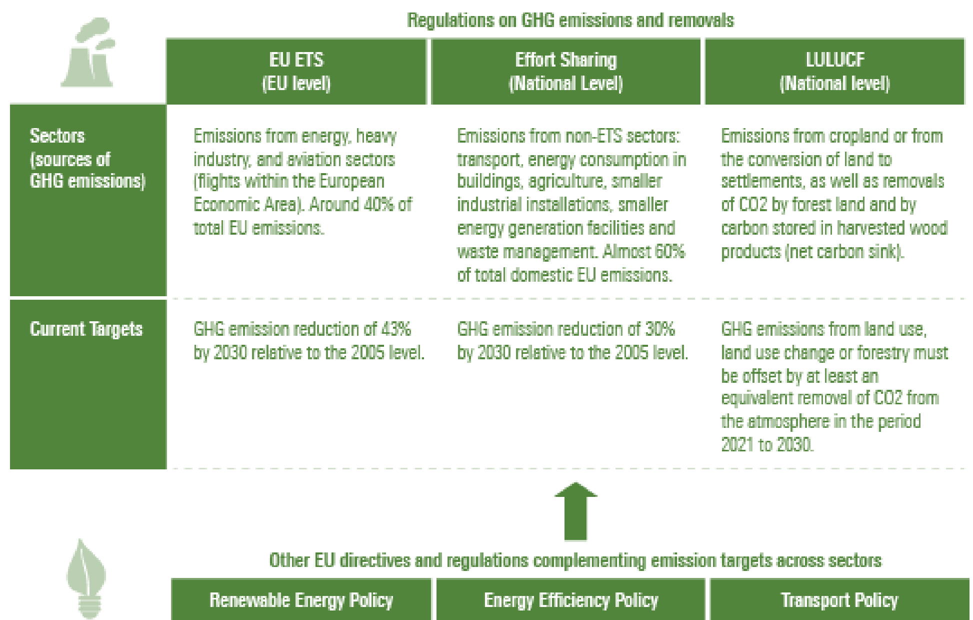
1. EU Emissions Trading System Directive;
2. Effort Sharing Regulation;
3. Land Use, Land Use Change and Forestry Regulation; and
4. CO_2 standards for cars and vans Regulation (light-duty vehicles).

Following these consultations, the EC intends to make specific climate policy proposals by June 2021.

An Overview of the EU Climate Mitigation Policy Framework and Potential Changes

The EU climate change mitigation policy framework includes the EU emission trading system (EU ETS), the Effort Sharing Regulation, which regulates the number of emissions, as well as other EU directives and regulations complementing emission targets: the Renewable Energy Policy, the Energy Efficiency Policy, the Transport Policy, and the Land Use, Land Use Change and Forestry (LULUCF) Regulation. The key ones are the EU ETS, the ESR, and the LULUCF, as they are directly related to GHG emissions and removals (see Exhibit 3). The Impact Assessment indicates that these three pieces of legislation will need to be fully updated.

Exhibit 3 The Current EU Climate Change Mitigation Policy Framework



Source: The European Commission and DBRS Morningstar

- The **EU ETS** is the largest carbon-pricing system in the world. It is a typical cap and trade system, which sets a limit on the amount of GHG that can be emitted by regulated sectors, and then allows the participants of the ETS to trade emission permits or allowances (carbon credits). The current EU ETS 2030 reduction target is 43% relative to the 2005 level. The EU ETS covers over 40% of total EU emissions, coming from large companies in the energy, heavy industry, and aviation sectors (only flights within the European Economic Area). Most of the 26% decline in GHG emissions in the EU between 1990 and 2019 took place within the EU ETS in power plants. A cleaner energy mix has been the main contributor to the decline in emissions so far, with the share of renewables in energy production increasing to 30%. The cap is reduced every year, and from 2021 to 2030, the annual reduction rate will increase to 2.2% from the current 1.7%. The reduction in the cap and the trade of allowances in the carbon market should continue to incentivise firms under the EU ETS to reduce their emissions further in a cost-effective way.

In the review to the EU ETS, the EC is currently exploring the possibility of including the building sector and road transport into emissions trading. The idea is that their inclusion would provide

bigger economic incentives to reduce emissions in these sectors across the EU, and, depending on the strictness of the cap, it could increase certainty over delivering the GHG emission reductions in those sectors.

Reacting to the agreement reached in the EU in December 2020 to increase the reduction in GHG emissions by at least 55% by 2030, the carbon price has reached its highest level since 2008. The cost of carbon allowances has increased above EUR 30 a tonne of carbon dioxide equivalent. In the past, the EU ETS carbon price has reached very low levels and has been volatile, in part reflecting a large surplus of allowances. Only recently the price has been lifted by the Market Stability Reserve, introduced in January 2019 to absorb surpluses. Market participants now expect the increased climate target to tighten the supply of allowances in the carbon market.

- The **Effort Sharing Regulation** sets the annual national emission reduction targets, covering the economic sectors outside the EU ETS, including transport, buildings, agriculture, and waste - almost 60% of total domestic EU emissions. Currently, for the EU as a whole, the emission reduction target for the sectors not included in the EU ETS is 30% by 2030 relative to the 2005 level, but countries with a lower GDP per capita have lower targets. To meet the national targets, EU countries can adopt their own policies, including carbon taxes, financial support, incentives for electric car purchases, and building standards. Countries present their specific policies in their National Energy and Climate Plans (NECPs).

  While there has been a significant reduction in emissions under the EU ETS, progress at the national level under the Effort Sharing has been more limited. Preliminary estimates show that Austria, Belgium, Bulgaria, Cyprus, Estonia, Finland, Germany, Ireland, Luxembourg, Malta, Poland, and the Czech Republic had emission levels higher than their 2019 targets, according to the EEA. The EC is currently reviewing the national targets to reduce emissions in the Effort Sharing sectors.

- The **Land Use, Land Use Change, and Forestry Regulation** (LULUCF Regulation) covers the net carbon sink, which is the combination of removals of CO_2 by forest land and by carbon stored in harvested wood products, and of GHG emissions from cropland or from the conversion of land to settlements. The LULUCF sector is key for the EU climate targets because these include the LULUCF emissions and removals. After increasing in the 1990s, the EU forest carbon sink has gradually decreased over the past decade, as a result of ageing forests and higher harvesting rates. According to the EEA, under existing policies and planned measures, the LULUCF sink in the EU is expected to decrease by 21% between 1990 and 2030.

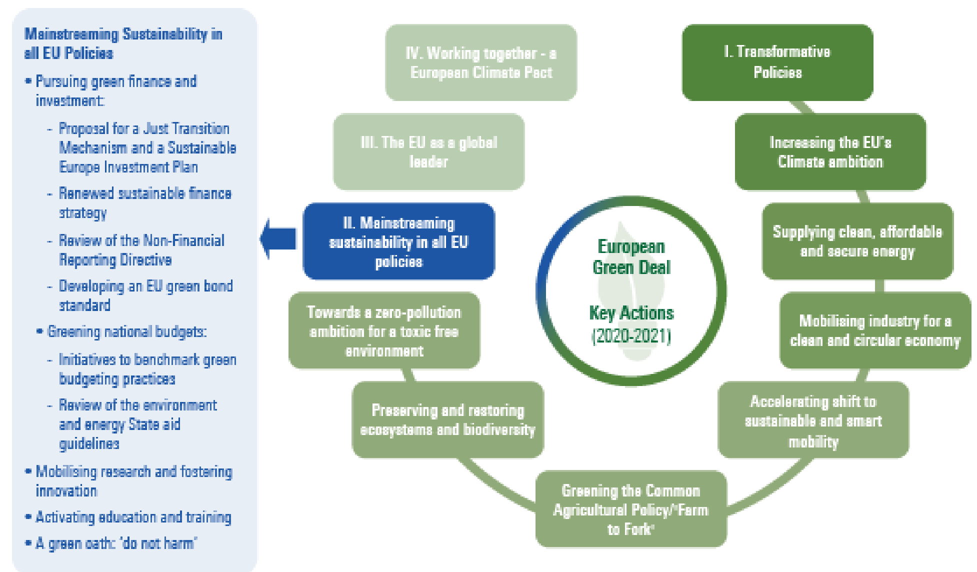
- The **Renewable Energy Policy** sets targets for renewables in energy consumption. According to the EEA, the EU was on track to achieve its target of a 20% share of renewables in energy consumption by 2020. The current target is to increase the share of renewables in energy consumption to at least 32% by 2030. This Renewable Energy Directive specifies national renewable energy targets for each country, taking into consideration their starting point and capacity. The **Energy Efficiency Policy** sets targets and standards for energy efficiency for sectors outside the EU ETS, including existing and new buildings. The Energy Efficiency Directive currently requires EU countries to improve energy efficiency by at least 32.5% by 2030. The Impact Assessment also looked at the appropriate level of target for renewable energy and energy efficiency in 2030.

- The **Transport Policy** (the CO_2 Emissions Performance Standards for Cars and Vans Regulation) aims to reduce GHG emissions from the transport sector with a strategy for low-emission mobility. Transport accounts for almost 25% GHG emissions in Europe. Stricter EU fleet-wide CO_2 emission targets will apply from 2025 and from 2030: emissions will have to reduce by 15% from 2025 for both cars and vans, and by 37.5% for cars and 31% for vans from 2030, relative to 2021. The reduction in emissions in the transport sector has been more limited compared with other sectors, remaining higher than in 1990. However, changes in the fleet offerings by auto manufacturers from 2021 onwards will help to transition the market into lower emissions.

Financing the Green Transition

The transition to climate neutrality requires significant investment from the EU, national governments, and the private sector. The Green Deal also presented climate action initiatives to mobilise investment to green activities and provide financial support to sectors and regions affected by the transition (see Exhibit 4).

Exhibit 4 The European Green Deal and Green Finance and Investment



Source: The European Commission.

To help finance the transition, in January 2020, the EC set up the European Green Deal Investment Plan (also known as the Sustainable Europe Investment Plan) and the Just Transition Mechanism. The Sustainable Europe Investment Plan is the investment pillar of the Green Deal, aiming to mobilise at least EUR 1 trillion in green investments over the next decade. This includes the use of private funds through EU financial instruments, notably InvestEU.

At the same time as there will be support for green investment and technologies, some regions and sectors will be affected by the transition to carbon neutrality. The Just Transition Mechanism is

intended provide targeted financial support to those affected regions and businesses, by at least EUR 100 billion over the period 2021-2027.

Moreover, in 2020, the EU also agreed on the Recovery Fund (Next Generation EU) to support a recovery of EU economies from the pandemic. Of the EUR 750 billion fund, 37% will be directed to green investments, requiring national governments to identify their green investments in recovery plans to be presented by April 2021.

Furthermore, the Green Deal also presented a Renewed Sustainable Finance Strategy. This renewed strategy is designed to further encourage the financial system to support businesses on their green transition. The renewed strategy is meant to build on the EC's initial 2018 Action Plan on Financing Sustainable Growth, which set the grounds to help channel private funding towards sustainable investments through 10 action items. The first action point, the EU Taxonomy, entered into force in July 2020. Please see DBRS Morningstar's *The EU Taxonomy in Place – A Milestone On Financing Sustainable Growth* commentary for more information.

2021: A Packed Climate Policy Agenda for the Decades to Come

2020 was the year of the global COVID-19 pandemic, but it was also the year with the highest global temperatures on record (together with 2016) according to the Copernicus Climate Change Service. As climate change becomes a more pressing issue for the planet, the EU is stepping up its efforts to reduce greenhouse gas emissions in line with the Paris Agreement to limit global warming. More ambitious and binding climate targets will require changes to current climate and energy policies as well as substantial investment.

2021 will be marked by important changes to climate change mitigation policies in the EU. This should provide European countries with the policies and tools to significantly reduce GHG emissions over the next decade and achieve climate neutrality by mid-century. Specific policy proposals are expected in June 2021. With more ambitious climate targets agreed, the EU is also well placed ahead of the 26th UN Climate Change Conference of the Parties (COP26), to be held in Glasgow in November 2021. In the COP26, parties will aim to speed up action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change. DBRS Morningstar will continue to monitor developments in climate mitigation policies as well as potential implications from stricter environmental regulations.

Related Research

Date	Research
January 13, 2021	The Positive Social Impact of Credit Union Products and Services
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November 17, 2020	Climate Change Strategies Coming into Focus for Large Canadian Banks with Restrictions on Fossil Fuel Lending
November 13,2020	Poor Governance in Mexico is Unlikely to Improve Under AMLO
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