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1 Introduction: the Green Deal is foreign policy

In December 2019, the European Commission introduced the European Green Deal, an ambitious policy package intended to make the European Union's economy environmentally sustainable. The goal is to reach climate neutrality by 2050, and to turn the transition into an

international diplomacy that will encourage sustainable investment and development. This international activism will necessarily spill over into relationships with the United States and China, which have their own views on how to promote sustainable development and manage international climate negotiations. Relationships with other countries, including the Gulf states and Russia, whose export interests will be directly affected, will also be transformed.

All these foreign policy efforts will provoke a geopolitical response from the EU's international partners. Responses will range from cooperation in implementing complementary climate policies, to competitive efforts to redirect trade and investment flows, to downright hostile efforts to counter the effects of the Green Deal.

In this paper, we map out the geopolitical implications of the Green Deal. We look not only at the effects of purposeful efforts to export climate policy, but also at the unintended side-effects. The second section focuses principally on the effects on Europe's energy trade patterns, its development policy, its approach to climate negotiations and, most controversially, the proposed carbon border adjustment mechanism.

The third section examines how other countries (with case studies of the US, China, Russia, Algeria and Saudi Arabia) might understand the Green Deal and how they are likely to respond.

The final section proposes an external action plan as an integral part of EU climate strategy. To succeed, the EU must address head-on the difficulties the Green Deal is likely to create with economic partners and neighbours. Only a pro-active EU attitude will help turn potential frictions into opportunities for renewed international partnerships. We therefore suggest a series of EU foreign policies to buttress the Green Deal. To succeed in implementing the Green Deal, the EU and its members will need to mobilise all their instruments of foreign policy in support of that agenda.

2 Mapping the geopolitical implications of the Green Deal

To make Europe climate neutral by 2050, the European Green Deal must pursue one main goal: to reshape the way energy is produced and consumed in the EU. The production and use of energy across the economy account for more than 75 percent of the EU's greenhouse-gas emissions (IEA, 2020).

Almost three-quarters of the EU energy system relies on fossil fuels. Oil dominates the EU energy mix (with a share of 34.8 percent), followed by natural gas (23.8 percent) and coal (13.6 percent). Renewables are growing in share but their role remains limited (13.9 percent), similarly to nuclear (12.6 percent) (Eurostat, 2019).

This situation will change completely by 2050, if the European Green Deal is successful. But change will be incremental. According to European Commission projections, fossil fuels will still provide about half of the EU's energy in 2030. But fossil fuels differ in their pollution intensity. Use of coal – the most polluting element in the energy mix – has to be substantially reduced by 2030, while oil and, especially, natural gas can be phased out later. Most of the change for oil and gas will happen between 2030 and 2050. Within this timeframe, oil is expected to be almost entirely phased-out, while natural gas would contribute just a tenth of EU energy in 2050 (Figure 1).

Figure 1: EU energy mix evolution (55 percent lower emissions in 2030 compared to 1990 and climate neutrality in 2050)

Source: Bruegel/ECFR based on European Commission [2020]. Note: among the various scenarios consistent with EU climate targets used by the European Commission, we picked the MIX scenario. E-liquids and e-gas are synthetic fuels, resulting from the combination of green

2.1 Repercussions for oil and gas producing countries in the EU neighbourhood

Discussions on the potential repercussions from global decarbonisation naturally focus on the impacts that reduced need for oil and gas in large markets could have on producing countries (IRENA, 2019). For Europe, this is notably the case for its major gas supplier, Russia, but also for other suppliers, from the Middle East and North Africa, the Caspian and Central Asia, which base their economies on the fossil fuels rents, and mostly export their fossil fuels to Europe (Figure 3).

Figure 3: Fossil fuel exports to EU as % of total exports, selected countries

Source: Bruegel/ECFR based on UN Comtrade. Note: Trade values taken from 2018, as reported global and EU27 imports from each country presented. Fossil fuels are the sum of 2701, 2709, 2711.

The anticipated decline in EU imports of oil and gas will have an almost immediate effect by reducing investment in new fossil fuel infrastructure and even reducing maintenance efforts for existing infrastructure. This will happen even though, as noted above, the EU is expected to keep importing oil and natural gas at more or less unchanged volumes for at least another decade.

It is important to note that for gas, in the 2030 timeframe, Europe's main energy supplier, Russia, could even benefit from the European Green Deal, as a coal-to-gas switch is necessary to quickly curb EU energy sector emissions. The role of natural gas as a transition fuel in the EU is likely to mean increased imports.

It is also important to highlight another potential, long-term impact of the European Green Deal on the EU's neighbourhood: a possible surge in trade in green electricity and green hydrogen.

One of the major drivers to deliver the European Green Deal will be electrification. To meet its increase in electricity demand, the EU will need to diversify its energy supply and increase its capacity to import electricity from other regions.

and North Africa, in particular, benefits from some of the best solar irradiation in the world², and from world-class wind energy locations³. While these renewable resources will primarily be exploited to meet Middle East and North African countries' own rapidly growing energy demand, there might be a case for future exports to Europe. Decreasing generation and transport technology costs might allow economies of scale that have so far prevented the implementation of such cooperation schemes⁴.

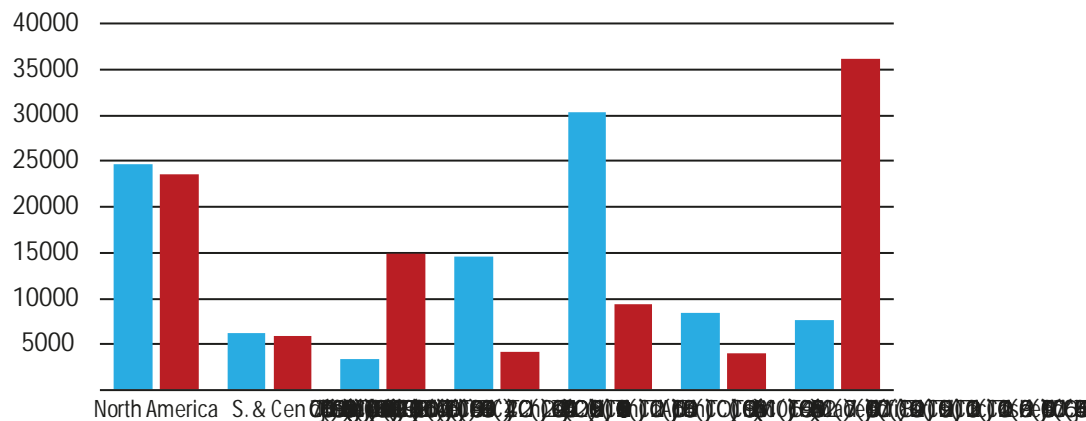
While renewable electricity is expected to decarbonise a large share of the EU energy system by 2050, hydrogen is increasingly seen as a way to decarbonise parts of the energy system electricity cannot reach⁵. This is why the European Green Deal includes a hydrogen strategy (European Commission, 2020a), aimed at installing 40 gigawatts (GW) of renewable hydrogen electrolyzers by 2030. Considering North Africa's renewable energy potential and geographic proximity to Europe, the region is being considered as a potential supplier of cost-competitive renewable hydrogen to Europe. Germany, for example, has partnered with Morocco to develop Africa's first industrial plant for green hydrogen, with intention of future exports to Germany⁶.

Future imports of renewable electricity and green hydrogen from the Middle East and North Africa (or other neighbours, such as Ukraine) could raise new energy security concerns, which will have to be mitigated with proper diversification.

2.2 Repercussions for global energy markets

Given the size of the European economy, the European Green Deal is also likely to have repercussions for global energy markets. Currently, Europe is the world's second largest net importer of oil after Asia Pacific (Figure 4).

Figure 4: Oil balance by region, 2019



Source: Bruegel/ECFR based on BP Statistical Review of World Energy (2020).

The fall in global oil demand resulting from Europe's transition to clean energy will have an impact on the global oil market, notably by depressing prices. The extent of the price decline will, of course, also depend on other countries' decarbonisation trajectories. Should Europe be alone in significantly cutting oil consumption, while other economies continue

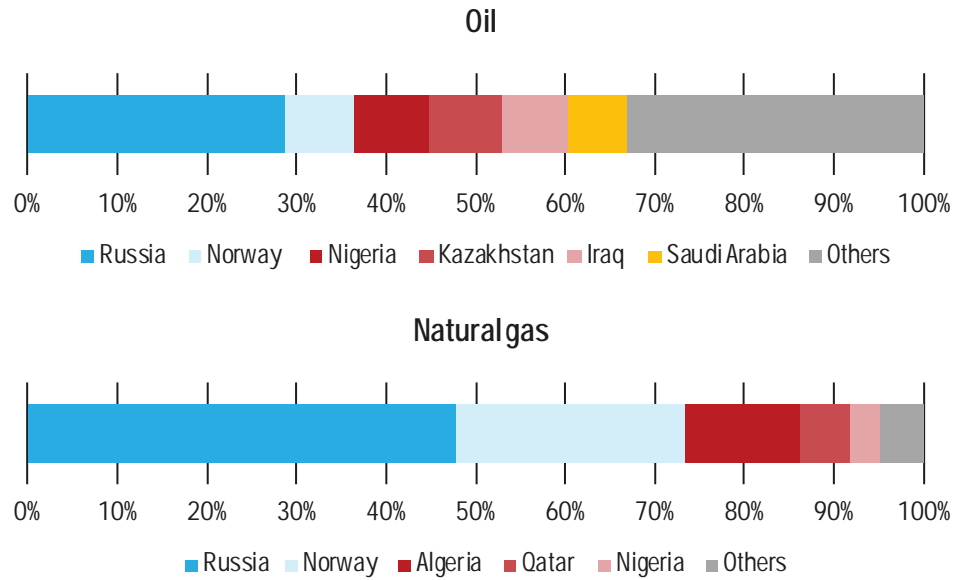
² https://www.eia.gov/energyexplained/solar/solar-irradiance.php
³ https://www.eia.gov/energyexplained/wind/wind-energy.php
⁴ Long-term energy scenarios for a net-zero world by 2050 - Energy scenarios for a net-zero world by 2050
⁵ https://www.ecfrcr.org/en/energy-scenarios-for-a-net-zero-world-by-2050
⁶ https://www.bmz.de/en/issues/wasserstoff/index.html

to rely on fossil fuels in their growth, markets and demand in Asia, Latin America and Africa



from the import of the minerals and metals needed for the manufacturing of solar panels, wind turbines, li-ion batteries, fuel cells and electric vehicles. These minerals and metals have particular properties and few to no substitutes.

Figure 6: EU imports of oil and natural gas by main trading partner, 2018

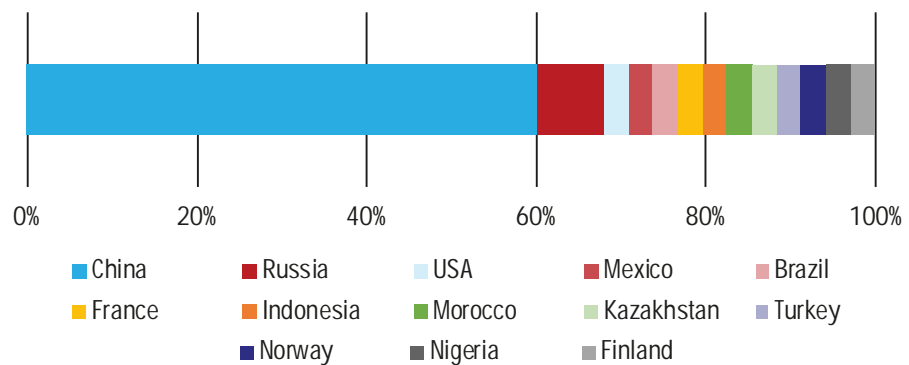


Source: Bruegel/ECFR based on Eurostat (2020).

While some of these minerals and metals are widely available and relatively easy to mine, others are either geographically concentrated in a few resource-rich countries, or treated and processed in a few countries. Europe itself has no significant mining and processing capacities for these critical raw materials. For instance, it produces only around 3 percent of the overall raw materials required in li-ion batteries and fuel cells (JRC, 2020).

In 2011, the European Commission produced a first list of critical raw materials, which has been updated every three years⁷. At time of writing it includes 27 materials judged critical because of their importance for high-tech and green industries, their scarcity and/or the risk of supply disruption.

Figure 7: Main suppliers to the EU of critical raw materials, average from 2010-2014



Source: Bruegel/ECFR based on European Commission (2017).

China is a leading producer and user of most critical raw materials. The import of rare earths from China is probably the most critical issue in this area, also because Europe has no mining or processing activity for these important minerals (Figure 7).

For Europe, dependence on China will further increase as demand for green technologies increases. For example, the JRC (2020) estimated that the EU's annual critical raw material demand for wind turbines will increase between 2 and 15 times over the next three decades. Overall, the European Commission (2020) expects Europe's demand for raw materials to double by 2050.

2.4 Repercussions for global trade, notably from carbon border adjustment measures

Taxing the carbon content of domestic production without taxing imports in a broadly similar way in principle disadvantages domestic production. Consumers would have an incentive to continue buying the same products but shift to foreign suppliers rather than switching to more efficient domestic producers. The European Commission has therefore said it will introduce a border carbon adjustment. The rationale is clear: if Europe puts in place a stringent climate policy while other parts of the world do not, there is a risk that emissions-intensive companies might leave the EU with its high carbon prices, and relocate to places with significantly lower or no carbon prices (see Wolcott, 2019, for an illustration). This leakage issue is set to become more relevant with the EU pursuing a more ambitious climate policy, even if the exact order of magnitude of carbon leakage is unclear (Claeys et al, 2019).

A carbon tariff would have a double aim: i) preventing carbon leakage by ensuring that all goods consumed in the EU, whether imported or produced domestically, are treated the same; ii) incentivising other countries across the world to also decarbonise. The tax or tariff would be based on the emissions embedded in imported products. In addition, EU exporters might reclaim the cost of the emissions embedded in their products to ensure that European companies are not at a competitive disadvantage when selling abroad. Given that the EU already imports significantly more carbon than it exports, the issue of carbon leakage cannot be ignored⁸.

But introducing a carbon tariff would be a substantial practical and political challenge – and indeed no country in the world has so far adopted such a tariff⁹. The initiative will face two main difficulties. The first, of technical nature, relates to the difficulty of calculating the emissions content of imports, as all emissions along the entire value chain would need to be considered. The second, of a geopolitical nature, relates to the risk of retaliation by trade partners. The European Commission has made clear that a carbon tariff should be compatible with the rules of the World Trade Organisation (WTO), to ensure that countries cannot retaliate based on WTO rules (Horn and Sapir, 2019, explain how this can be done)¹⁰.

But even if the carbon tariff is safeguarded against formal objections, trade partners might still perceive it as overreach and threaten or adopt retaliatory measures. Something similar happened in 2012 when the EU directive on aviation emissions (2008/101/EC) went into effect. The directive entailed a form of carbon border adjustment by extending the EU emissions trading system (ETS) to all flights entering or leaving the EU. A group of 23 countries – including the United States, China, India, Japan and Russia – strongly opposed the EU move and listed retaliatory measures they would take unless the EU changed the rule. Because of this forceful reaction, and in view of some developments in international negotiations on emissions controls, the EU withdrew the measure for intercontinental flights.

⁸ Claeys et al (2019) – <https://www.hautconseilclimat.fr/publications/maitriser-lempreinte-carbone-de-la-france/>

International reactions to the introduction of an EU carbon border tax are likely to be very diverse. Countries that strongly emphasise action to tackle the climate problem are likely to be supportive of the initiative, and might replicate it. However, countries that export emis-



... (Paramonova, 2020). Except for monitoring carbon output, all emissions regulations remain voluntary.

Russian President Vladimir Putin continues to deny that climate change is caused by human activity and insists that Russia has ...¹¹. Meanwhile, Russia remains enormously dependent on hydrocarbons. Russia failed to meet Putin's goal of reducing the share of fossil fuels in the country's economy by 40 percent between 2007 and 2020 (it decreased by only 12 percent)¹². Russia's coal development programme for 2035 was revised upward in 2019, setting a new target of a 10 percent to 20 percent growth in coal output. There remains strong opposition in Russia to any regulatory effort to limit carbon emissions, particularly from the Russian Union of Industrialists and Entrepreneurs.

In context, the Green Deal could have a major impact on Russia. In 2016, oil and gas revenues contributed 36 percent of the country's government budget¹³ and Europe absorbed 75 percent of Russian natural gas exports and 60 percent of its crude oil exports¹⁴. Over the next decade, the EU-Russia oil and gas trade will not be substantially impacted, as Europe would only marginally reduce its oil and gas imports by 2030 even in a 55 percent emissions reduction scenario (see section 2), but the situation will radically change after 2030 when Europe is expected to substantially reduce its oil and gas imports.

The Green Deal may increase short-term demand for Saudi oil which has a lower carbon footprint than oil from Russia or the United States

will delay diversification and aim to continue maintaining strong control over rents.

In the long term, this could present the EU with a dilemma. If the Algerian government, fearing loss of control, fails to make a transition away from hydrocarbons, the Algerian economy could lapse into nearly terminal decline. The possibility of such instability on Europe's periphery would create incentives for Europeans to relax conditionality and foster an energy transition in Algeria that sustains the current regime.

3.3 Global players: Saudi Arabia

Saudi Arabia is the world's biggest oil exporter. Oil and gas revenues amounted to 80 percent of Saudi Arabia's total exports in 2018 and accounted for 67 percent of its government revenues in 2017 (Tagliapietra, 2019). More fundamentally, Saudi Arabia's long dependence on the rent from hydrocarbons has created an economy that relies on public sector employment (30 percent of the workforce) and expensive and economically inefficient subsidy schemes (costing \$37 billion in 2017), particularly in the energy market (Tagliapietra, 2019).

Unlike in Algeria, however, the European Green Deal does not directly threaten this model. Saudi Arabia exports less than 10 percent of its oil to Europe. Its main markets, now and likely even more in the future, are in Asia to which it already exports over 70 percent²² of its oil. A European transition to renewables is not, therefore, a major problem for Saudi Arabia. Indeed, the European Green Deal may even increase short-term demand for Saudi oil which has a lower carbon footprint than oil from Russia or the United States. Saudi Arabia could face 30 percent to 50 percent less in EU carbon tariffs than most competitors²³.

Overall, the Saudi approach so far has been to say little about the Green Deal, privately encourage the Europeans to develop new renewable technology, and focusing their energies on making fossil fuels cleaner. Saudi Arabia used, for example, its 2020 chairmanship of the G20 to promote the idea of a circular carbon economy, an effort to make the use of oil and gas more climate-friendly.

However, the broader transition away from fossil fuels, of which the Green Deal is a part, presents a serious long-term threat to the Saudi model of a rentier state. As demand and prices for hydrocarbons fall, Saudi Arabia's ability to afford its large public-sector wage bill and domestic energy subsidies will erode, perhaps even threatening Saudi domestic stability. Already Saudi foreign exchange reserves are in decline²⁴, in line with oil revenue declines since 2014.

The Saudi regime, led by the crown prince, Mohammed Bin Salman, appears very aware of this threat and has adopted a strategy to deal with it. Most publicly, it launched in 2016 the Vision 2030 programme, a broad-ranging development plan to diversify the economy away from hydrocarbons, develop private small- and medium-enterprises, and create a non-oil export sector.

The idea of global peak demand for oil being reached soon has inspired Saudi Arabia to increase its export capacity in order to produce as much oil as possible and seize market share before demand fades away²⁵. Saudi Arabia's relatively low-cost production means that it can sustain low prices that might drive competitors such as Russia, Venezuela and Iran out of the market. This low-cost strategy threatens the entire climate change effort embodied in the Paris Agreement, as it makes it more difficult for renewable energy resources to compete with hydrocarbons. The outcome will depend on the evolution of green technology and the ability of the European Green Deal and other efforts to get global energy consumers to internalise the cost of carbon emissions.

In the context of a long-term fall in demand, increased market share, even at lower prices,

²² <https://www.washingtonpost.com/world/2019/09/16/who-buys-saudi-arabias-oil/?arc404=true>.

²³ <https://www.bcg.com/en-gb/publications/2020/how-an-eu-carbon-border-tax-could-jolt-world-trade>.

²⁴ <https://www.ft.com/content/6825366f-92db-4473-b5b2-cacda032d8ee>.

²⁵ <https://www.reuters.com/article/energy/saudi-arabia-aims-to-increase-oil-export-capacity-as-demand-fades-idUSKBN25G0001>.

As the US exports more than €5.5 billion (2018)³¹ worth of passenger cars to Europe, this could have a large impact on a politically sensitive industry. Similarly, the Green Deal may include stricter agricultural policy based around sustainable practices, which could negatively affect the 13 percent of US agricultural exports that go to the EU (CRS, 2020).

It is, however, the carbon border adjustment mechanism (CBAM) proposal that generates the most concern in the United States. A carbon tariff could dramatically impact US exports of coal, natural gas and many manufactured products. The US exported³² over 1.5 million barrels of day of petroleum products to Europe in 2019, about 19 percent of its export market³³.

The Trump administration viewed the Green Deal threat to this important industry as an unacceptable infringement on US sovereignty and pure protectionism. Wilbur Ross, the US Secretary of Commerce promised retaliation, noting that

entering the European Union poses a more fundamental challenge to Beijing. Especially at the lower end of the value chain where margins are not particularly high, Chinese manufactured products could lose their comparative price advantage (and thus their appeal), making it more attractive for European industry to source from other 'greener' partners. This could exert significant pressure on Beijing to adapt its own policies and serve at least temporarily as leverage in getting China to commit to an overall more ambitious climate change and sustainability agenda. Otherwise current trends towards the greater diversification of global supply chains away from China, which started because of the US-China trade war and were accelerated by the COVID-19 crisis, could be further exacerbated. Adding this extra price tag for importers of Chinese goods could help level the playing field. European companies are already considering greater localisation of their value chains and production processes, which could entail production specifically for the Chinese market within China. This would effectively decouple Europe's China business from other parts of the global economy.

promoting transparent cooperation on technical and regulatory matters in different fields. This should also be considered as part of a foreign policy action plan for the European Green Deal.

From a policy perspective, a clear strategy and a foreign policy action plan are needed. We suggest dual approach: i) actions to manage the direct geopolitical repercussions of the European Green Deal; ii) actions to foster EU global leadership in the field (Figure 9).

Figure 9: A foreign policy action plan for the European Green Deal

Source: Bruegel/ECFR.

4.1 Action to manage the direct geopolitical repercussions of the European Green Deal

#1 Help neighbouring oil and gas-exporting countries manage the repercussions of the Green Deal

The EU has a strategic interest in contributing to the stability of its neighbourhood, for a number of reasons, from migration to trade. In this context, helping oil and gas-exporting countries in the neighbourhood to manage the repercussions of the European Green Deal will be a crucial item in the foreign policy agenda.

The EU should not adopt a one-size-fits-all approach here. It should rather adopt an approach that fits the specific context of each partner country and focuses on the most promising local competitive advantages. Europe's past experiences of promoting abstract regional cooperation projects should not be repeated.

The EU and its oil and gas-exporting neighbours have time to properly plan this transition. Up to 2030, the EU will continue to import oil and gas from neighbours, and significant declines will only start after 2030. The decade to 2030 should be used to prepare for what will come afterwards. Revenues from oil and gas exports should be increasingly utilised by oil and gas-exporting countries to diversify as export

substitution of critical materials. Where possible, increasing the domestic supply of critical raw materials could alleviate Europe's reliance on imports. Likewise, diversifying the import portfolio represents a sensible strategy to avoid risks of over-dependency on a single supplier. Trade agreements or contracts with different supplier countries could help reduce the threat of supply shortages. Alongside diversification, Europe should pursue recycling and substitution strategies. While several critical raw materials have a high technical recycling potential, their recycling rate remains generally low. Increasing the cost competitiveness and efficiency of sorting and recycling technologies is thus a priority. In this field, the EU can provide support for research and innovation (through Horizon Europe) and for technology demonstration (for example, via the Innovation Fund).

#3 Work with the United States to establish a common carbon border adjustment mechanism

As noted in section 2, even if the introduction of a carbon border adjustment mechanism is done in a way that prevents formal objections at the WTO, trade partners might still perceive it a protectionist measure and threaten or adopt retaliatory measures. The challenge for the EU will be to design a carbon border tax (Horn and Sapir, 2020).

President-elect Biden's climate plan pledges similar carbon border adjustment meas-

the basis for an international hydrogen market based on EU standards. Moreover, it could try to consolidate the role of the euro in the sustainable energy trade.

Finally, the EU can become a standard-setter for green bonds. The global green, social and sustainability-related bond market reached €270 billion in 2019. The segment currently remains a niche, representing about 5 percent of the total bond market. However, it is rapidly expanding. Between 2018 and 2019, it expanded by 50 percent, and it is expected to have reached €338 billion in 2020. The EU is not only the biggest player in the market with 45 percent of global issuance in 2019, but is also the market experiencing the strongest increase, with a 74 percent jump between 2018 and 2019. In a survey, 67 percent of respondents indicated a lack of adequate supply of green bonds (TEG, 2019). Moreover, respondents specified that regulation is the most effective way to scale-up the green bond market, with the development of a clear taxonomy being a priority. Considering the current relatively small size of the green bond market, its expected rapid growth, the EU's substantial share and investors' needs for standardisation, the EU could well become a global standard-setter.

#5 Internationalise the European Green Deal

The EU produces less than 10 percent of global greenhouse-gas emissions. This implies that to have an impact on global warming, the EU needs to push the green transition beyond its borders. It has two main instruments for this: i) the EU budget and Next Generation EU, and ii) EU development policy.

The EU budget and Next Generation EU

The EU adopted in 2020 its budget – in jargon, the Multiannual Financial Framework (MFF) – for the period 2021-2027, the overall size of which is €1074.3 billion. On top of this, the EU established in 2020 its post-COVID-19 recovery fund – named Next Generation EU (NGEU) – for 2021-2023, with an additional €750 billion of resources. The whole package thus amounts to around €1.8 trillion. The EU has pledged to devote 30 percent of MFF spending and 37 percent of NGEU spending to climate action⁴². This means that between 2021 and 2027 around €600 billion of 'fresh' EU resources will be made available for the green transition. There are of course many demands on this money, but the EU could agree to devote 10 percent of the resources earmarked for climate action – €60 billion – to internationalise the European Green Deal to neighbouring countries and beyond.

Such an approach, entailing the provision of grants, loans and guarantees for sustainable energy projects in partner countries, would help meet global climate objectives more efficiently, as countries in the EU neighbourhood and in the developing world have lower

create a single entity, such as a European Climate and Sustainable Development Bank (Council of the European Union, 2019). NDICI and a new climate bank could become the primary tools for exporting the European Green Deal to the developing world, starting with Africa.

#6 Promote global coalitions for climate change mitigation: a coalition for the permafrost

Around a quarter of the Northern hemisphere is covered in permanently frozen ground (permafrost). As a result of rising global temperature, the Arctic permafrost is not thawing gradually, as scientists once predicted, but at an unprecedented speed. This is a major problem for climate change, because the permafrost is a massive reservoir of greenhouse gases. As these soils thaw they release ancient organic materials – and masses of greenhouse gases – that have been frozen underground for millennia. The potential magnitude of the problem is shown by the up to 1,600 gigatonnes of carbon dioxide held in permafrost globally: nearly twice what is currently in the atmosphere. Scientists have pointed to the urgent need to avoid a tipping point that would see global warming release the gases from the permafrost, making global warming much worse. The EU should initiate and lead a global coalition for the permafrost, aimed at funding research to better assess the current status of the problem and at funding measures to urgently contain the permafrost thaw, such as restoring grassland by reducing forests and increasing grazing by large animal herds (Macias-Fauria, et al., 2020). This is a global common good, and as such it requires international cooperation.

#7 Promote global coalitions for climate change mitigation: a coalition for CO2 emissions removal

Another global common good requiring international cooperation is carbon sequestration. Removing CO2 from the atmosphere will be necessary to reach climate neutrality by the middle of the century and subsequently to achieve net negative emissions.

CO2 can be removed from the atmosphere through both nature-based and technological solutions. Nature-based solutions include afforestation and reforestation. Technology-based solutions include carbon capture and storage and geoengineering solutions such as direct air capture.

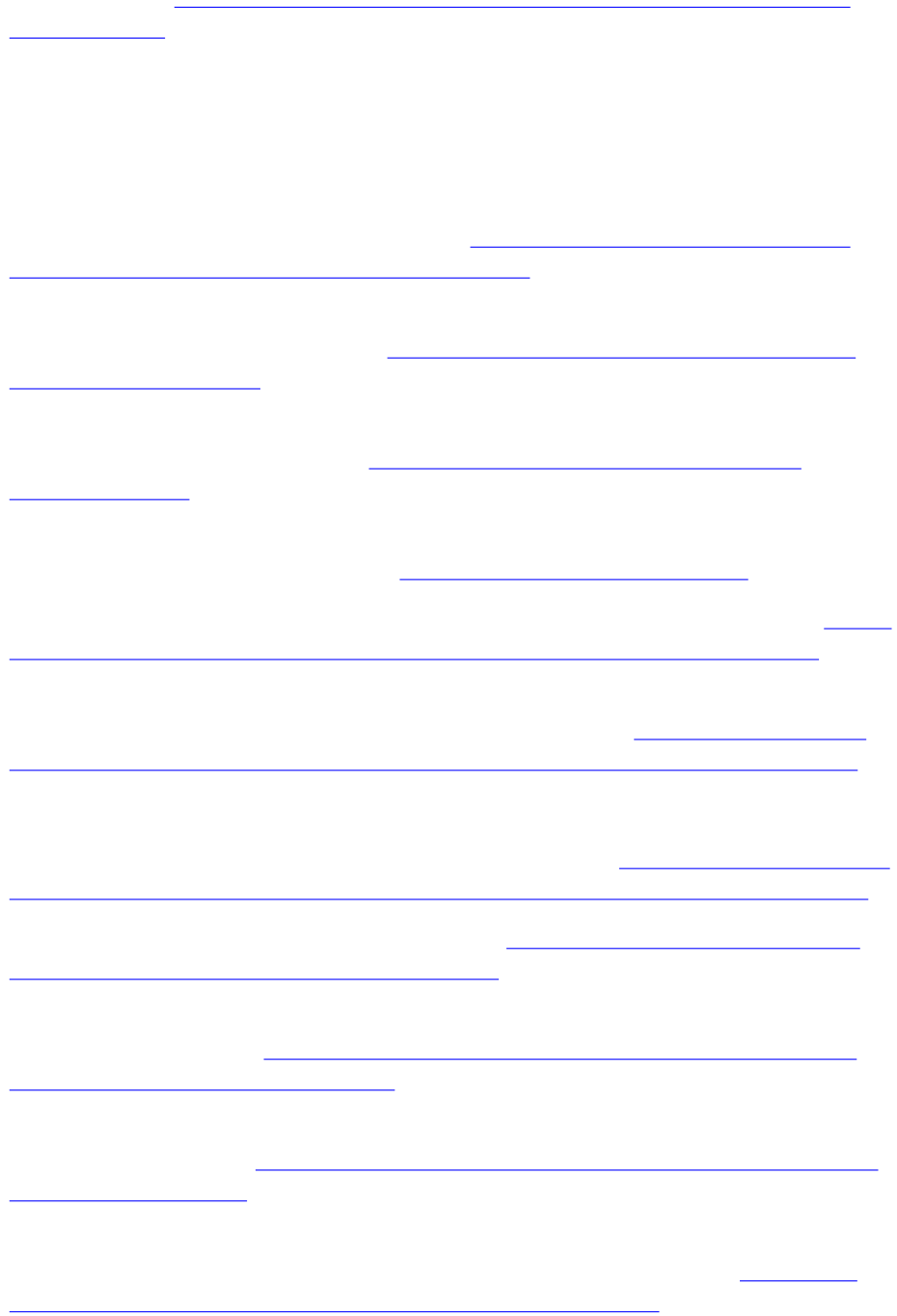
The EU should establish a global coalition for CO2 emissions removal aimed at promoting international cooperation in the field. The coalition should include countries, companies and international organisations willing to invest jointly in afforestation and reforestation activities across the world, and to invest jointly in research, innovation and demonstration projects for technology-based solutions. The preservation of rainforests as major sinks of CO2 is essential. With carbon pricing currently far from delivering the necessary investment signals, there is an absence of incentives to pursue both solutions. This makes international cooperation of paramount importance.

The EU should use trade, development and financial policy to pursue this agenda.

#8 Promote a global platform on the new economics of climate action

The EU should become a global reference on the socio-economic implications of decarbonisation. Being at the forefront of global decarbonisation efforts, the EU is among the first to deal with its socio-economic impacts. The aim of the European Green Deal is to intelligently promote decarbonisation by tackling the distributional effects of the economic and industrial transformation it necessarily implies, and by ensuring the social inclusiveness of the overall process. Issues such as just transition and addressing the distributional effects of climate policies are key for the successful unfolding of the decarbonisation process. Likewise, green industrial policy and green investments are key to seize the industrial opportunities of decarbonisation, promoting jobs and economic growth. The EU could establish multilateral forums to share with international partners lessons learned and good practices. This could replicate the approach of EU carbon market cooperation with international partners, which has, for instance, provided a significant contribution to the launch of China's nationwide emissions trading system.

Together, these actions would provide foreign policy support for the European Green Deal. They respond to the geopolitical challenges that other countries are likely to face from the Green Deal and from increasing global warming more generally, and offer ways to leverage European efforts and expand the decarbonisation push beyond the EU – which will be a



- IEA (2020) 'World Energy Outlook 2020', available at <https://www.iea.org/reports/european-union-2020>
- IRENA (2019) 'Renewable Energy Sources: Global Status Report 2019', available at https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Apr/IRENA_Global_Energy_Transformation_2019.pdf
- JRC (2020) 'Critical Raw Materials for the EU', available at https://rmis.jrc.ec.europa.eu/uploads/CRM_2020_Factsheets_critical_Final.pdf
- Macias-Fauria, M., P. Jepson, N. Zimov and Y. Malhi (2020) 'Pleistocene Arctic megafaunal ecological engineering as a natural climate solution?' *Earth System Science* B375: 20190122, available at <http://doi.org/10.1098/rstb.2019.0122>
- Makarov, I. and A. Sokolova (2017) 'Carbon emissions in Russia's Trade: Implications for Climate policy', *Energy Economics* 68: 11(2): 1-20
- Oertel, J., J. Tollmann and B. Tsang (2020) 'Climate superpowers: How the EU and China can compete and cooperate for a green future', *ECFR*, 3 December, available at <https://ecfr.eu/publication/climate-superpowers-how-the-eu-and-china-can-compete-and-cooperate-for-a-green-future/>
- Paramonova, N. (2020) 'Will EU Green Deal Force Russia to Clean Up Its Act?' *Energy Economics* 90: 105300, available at <http://eu-russia-expertnetwork.eu/en/analytcs/eu-green-deal-paramonova>
- Tagliapietra, S. (2019) 'The impact of the global energy transition on MENA oil and gas producers', *Energy Economics* 82: 105000, available at <https://www.sciencedirect.com/science/article/pii/S0140374719300026>
- TEG (2019) 'Green Bond Standard', EU Technical Expert Group on Sustainable Finance, available at https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/190618-sustainable-finance-teg-report-green-bond-standard_en.pdf
- Wang, J. (2020) 'America's domination of oil and gas will not cow China', *Briefing*, 17 September
- UNEP (2019) 'Global Environment Outlook 2019: Ecosystems', United Nations Environment Programme, available at <https://www.unep.org/global-environment-outlook-2019>