Austria, Europe and beyond – The European Green Deal

The von der Leyen Commission has presented the European Green Deal as its most crucial project to counteract the consequences of climate change, curb global warming and promote environmental protection. Its overarching objective, that the EU will be climate-neutral by 2050, will not be easy to achieve within the time frame presented and will face substantial headwind. Given the magnitude of the aims the European Green Deal sets out to achieve, it is foreseeable that challenges will arise that are not addressed in the European Green Deal, but will have to be met as they come up. In my research, I will focus on three overarching problem areas that need to be addressed by policymakers in order to counteract a weakening of social cohesion, a decrease in the competitiveness of the European single market, and a dilution of the goals of the European Green Deal.

Challenge 1: Distributional Effects

The first challenge is the question of which population groups will be particularly affected by the effects of transformation and the measures taken to achieve the decarbonization goals. As the Gilet Jaunes protests in France have shown, regressive climate policy measures can spark social counter-movements and force policy makers to reverse their plans. Accordingly, consideration must be given not only to the means by which the desired goals can be achieved, but also to whether they are socially acceptable and whether they disproportionately affect already marginalized segments of society. In order to achieve the set climate targets, there is no question that additional tax burdens will also be necessary. The crux of the matter, however, is how this additional burden can be distributed in a way which is as equitable and tolerable as possible. The question that then arises is to what extent society is willing to support such tax measures and how policymakers can use them in such a way that, with as little burden as possible, the necessary results can be achieved that will enable structural change.

The European Union's top aim, which is clearly represented in the "Energy Union Strategy" that was developed in 2015, is to provide European businesses and consumers with energy that is both inexpensive and clean. The goal of the European Union to achieve a climate-neutral economy by the year 2050 calls for measures to be adopted on the European, national and regional level. It is expected that member states provide their own long-term plans, which must not only target the reduction of greenhouse gas (GHG) emissions but also take into account the socioeconomic implications of decarbonization efforts.¹ Plans for national energy and climate change policy often contain actions with a shorter time horizon, the purpose of which is to guarantee that member states reach the individual objectives set for 2030. On the basis of this information, the Commission came up with a number of specific recommendations on jobs, skills, and energy poverty. The European Union provides assistance to its member states in the implementation of the "Just Transition Mechanism", which was developed with the intention of mitigating the projected societal and economic costs associated with the transition to a climate-neutral union.

Other avenues of financial assistance come in the form of the "Multiannual Financial Framework" as well as the "NextGenerationEU" fund.ⁱⁱ

The European Green Deal's many policies will have various consequences for the member states, regions and communities they affect. Since carbon pricing is going to be such an important policy tool to achieve the desired emission reduction, the most consideration will be given to it in this paper. The inter- and intra-national implications of stricter regulations regarding the price of carbon dioxide emissions as they relate to the European Green Deal are to be examined with a particular focus on unfavorable distributional consequences that may be brought about by the price of carbon.

Inter-country aspect

On the supply side, reaching comparable emission objectives by pricing carbon will vary greatly across nations. For a number of reasons, it will be comparatively easy for some member states to cut their emissions in contrast to others. This is because, for example, they will be able to decommission older, more polluting assets (such as dated industrial plants or coal power plants) that were probably going to be shut down anyway.ⁱⁱⁱ Similarly, how a country's carbon emission are made up might vary greatly from each other due to the fact that some states have a higher share of emissions stemming from industries such as the energy sector, that are easier and less expensive to decarbonize. Furthermore, carbon pricing has an effect on the supply side of the economy, which has a knock-on effect on households. Different household groups will be impacted differently by these changes.^{iv} Due to the uneven distribution of wealth among EU member states, some will perceive a particular carbon price to be more onerous in comparison to their national consumption expenditure. Additionally, changes in consumption costs that are caused by changes in the price of carbon have an unequal effect on households. When looking at the supply side, it will be cheaper for certain countries to lower their emissions. In the case of certain member states, for example, it is still possible to shut down contaminating facilities that have reached the end of their economically viable lifespan, whereas in other states it will be necessary to make substantial additional investments in order to lower emissions within a specific industry.^v However, there are major variations in the prospects for carbon reduction between industries. This may be shown by comparing the emission profiles of the countries participating in the European Union Emissions Trading System (ETS). The ETS includes emissions from the industrial sector as well as the electricity sector.vi In general, wealthier member states contribute a greater proportion of total industrial pollution, which are difficult and expensive to reduce. In contrast, less wealthy member states often have power sectors that produce comparatively higher levels of emissions, but these emissions may easily be reduced at a lower cost.vii

Intra-country aspect

The increased emissions reductions brought about by the Green Deal will also result in repercussions for distributional issues within individual member states. When carbon is priced, commodities and services that produce a lot of emissions, such as gasoline and fuel for heating, will cost more than other products and services that emit less carbon overall. This has an uneven effect on different segments of society due to the different spending habits of households. The fact that lower-income families often devote a greater proportion of their income to the purchase of energy commodities results in their consumption being substantially more expensive and thus they are more severely affected by price fluctuations. Due to this, a carbon price has a greater impact on the spending habits of lower-income families, which makes it more difficult for them to meet their financial obligations.viii Furthermore, the incomeside effect impacts individuals directly on the supply-side. Since wealthy households accumulate higher shares of their overall income from labor and capital, the returns on which are reduced as a consequence of carbon pricing, affluent individuals often suffer greater financial losses as a result of the policy of carbon prizing. Poorer families, on the other hand, get a considerably higher proportion of transfer income, which is less impacted by carbon pricing. Therefore, lower-income families have a greater buffer against the effect of factor income losses.ix

Austrian perspective

Under the new Austrian carbon price, multiple measures have been taken to soften the effects on consumers and thus cushion the adverse effects. Carbon pricing in Austria is linked to energy price changes as part of a price stability mechanism to make up for the volatility of energy costs. In the year after an energy price increase, the price of carbon declines, while in the year after an energy price decrease, the price of carbon rises. This mechanism was set up to forestall any increased hardship on lower income households for whom energy consumption already makes up a higher share of their total expenditure. Additionally, impacts of carbon taxes vary by area. Urban residents are considerably less likely to suffer consequences than rural families, as they pay less on transportation due to the availability of adequate public transport, and fuel for their heating. Residents of less urbanized areas who frequently must utilize private transportation to get to work or fulfill basic necessities thus face higher costs from an overall increase in energy prices. Initial plans for the "Klimabonus," which will go into effect in 2022, called for reducing such geographical variations by directly supporting residents in rural areas and investing some of the added revenue from the carbon tax in public transport infrastructure in the countryside.x

Policy considerations

By compensating lower-income households, developing the specific policy measures in a way that lessen the distributional consequences, and implementing progressive climate policies, the distributional implications of many climate policies can be mitigated.

Lower-income household compensation

Theoretically, governments may redistribute some of the proceeds from their auctioning to households to make up for the pass-through. Especially for low-income

households, who can be disproportionately harmed by the pass-through of carbon pricing, reimbursement can be crucial. This compensation may come in a variety of shapes:

- Social policies, like transfers to households with the greatest needs. This may be a potent strategy for offsetting the negative consequences of climate measures. Designing a plan that consistently targets the households that are most impacted without introducing unfavorable incentives is challenging. Households near to this limit may be enticed to lower their earnings so to receive the transfer, for instance, if only households with incomes below a specific minimal level are eligible.^{xi}
- 2. Lump-sum transfers are more advantageous for low-income households than high-income households because they represent a larger percentage of their income. However, since these transfers are costly, compensating high-income households could seem counterproductive.^{xii}
- Low-income households may be compensated for the consequences of climate policy by lowering regressive taxes or raising labor tax exemptions. However, altering taxes might also affect incentives. For instance, lowering the value added tax (VAT) on energy could encourage greater usage, running counter to the initial goal of the policy.^{xiii}

Focusing on less-regressive policies

Policymakers may give priority to features that are least regressive in order to lessen the consequences on lower-income households. For instance, charging high costs for carbon in the transportation sector, particularly in aviation, will have less significant effects than charging the same for heating or energy, as one will affect higher-income households to a greater extent. If the EU wishes to achieve its decarbonization target, the carbon price set by the EU ETS may need to increase significantly. By shielding industrial users and passing down the expense to households, the ETS is built in a profoundly regressive manner. Giving households a per-capita portion of free allowances would be one method to lessen this tendency.^{xiv}

Equitable distribution of the benefits of climate policies

Governmental investments in low-carbon technologies that primarily support lowincome households could lessen inequality. Examples include government initiatives to improve public transportation or public housing energy efficiency. Another strategy is to make sure that regulations and market design decisions fairly compensate lowincome households for the flexibility they may provide to the electricity and heat system. An example for this would be low-income households that can decide to sign up for cheaper heat and electricity rates in exchange for a slightly reduced energy security.^{xv}

Challenge 2: Job loss

Due to the far-reaching changes that many sectors will have to go through to achieve the goals of the European Green Deal, the labor market is facing serious changes. On the one hand, the European Green Deal will result in the elimination of jobs that were located in industries that do not align with the plans of the European Green Deal. On the other hand, there is also the potential to create new jobs in the renewable economy and make Europe a pioneer in the field of renewable energies. This does not necessarily mean, however, that the employees whose jobs are lost will benefit from the creation of the new jobs. It is clear that some sectors will benefit from structural change while others will not. In particular, industries with high GHG emissions will either be forced out of the market or will have to change drastically. The coal industry will be particularly hard hit, but other sectors such as heavy industry will also be affected. Exactly how many jobs will be lost in these sectors and how and whether workers can be retrained to gain a foothold in the decarbonized economy is far from certain. Even if industries manage to develop toward low-carbon production and thus secure jobs, it can still be assumed that some of them will be lost, especially in the field of fossil fuel production as a result of decreased demand for such products.xvi What will happen to jobs in industries without long-term prospects is a key challenge for the European Green Deal. Since it is foreseeable that some existing jobs will disappear, and noting the devastating consequences this can have on the individuals as well as the regions affected, the consequences of structural change must be mitigated as best as possible. Therefore, the second part of this research paper deals with the measures that have to be created on the European level and the existing instruments in Austria that could represent a best practice model for other European countries facing structural change.

The Organization for Economic Cooperation and Development (OECD) identifies four primary pathways by which environmental policies may have an influence on various economic sectors and labor markets:

- 1. General changes to the modes of production: When responding to green growth legislation, businesses will utilize less polluting inputs and processes that are particularly pollution-intensive. Because of this, the labor demand in each industry will shift. However, the direction of this shift depends on the respective industry.
- 2. Shifts in the dynamics of consumer demand: Green regulations bring about price reductions for environmentally friendly items in comparison to those that produce pollution. The demand for environmentally harmful and non-polluting commodities is affected by the fluctuation in the relative pricing of such items. As a result, consumers are more likely to choose environmentally friendly products as they become more cost competitive. Because of this, general demand patterns fluctuate, which in turn causes fluctuations in output across industries. The amount to which employees are able to transition across industries has an impact on how the impact on employment will play out overall.

- 3. Shifts in aggregate income and the economy at large: The adoption of environmentally friendly policies has the potential to affect the state of the economy as a whole, particularly aggregate supply, demand, and the job market. Adjustments to the national budget may also be the result of such policies, for instance as a result of shifts in the amount of money collected in taxes. Well managed green policies may produce various benefits. They have the potential to result in enhanced environmental cleanliness, increased health and welfare of individuals, and an economy that is more efficient as a consequences of the decrease of taxes on the labor market.
- 4. Shifts in commerce and productivity: The production of carbon intensive items in a specific country that is subject to green policies might result in the good being more costly when compared to the production of equivalent goods in states that do not have such restrictions. These considerations are applicable to items that are exchanged on the international market.^{xvii}

Consequently, distortions on the labor market are to be expected for a variety of reasons. This does not mean that there will be a net loss of jobs, but a strong turnover is to be expected. In order to design an effective social policy that attempts to compensate for these effects and cushion the loss of jobs as best as possible, a detailed analysis of the expected trends is of utmost importance.

Expected trends

Calculating the total loss of jobs caused by the transformation is difficult as other important structural elements, like social or technological development, which will also have a large impact on European labor markets in the future, are difficult to separate from one another. Furthermore, some sectors will be able to modify their output by utilizing less carbon-intensive processes, which will allow them to internally restructure their workforce rather than eliminate it. The numbers of jobs which will be lost due through these processes is therefore unknown. Transitional policies will alter the kind of jobs that are available to people with different skill levels, which will have an impact on the labor markets. Between non-green employment that will disappear and green jobs that will be created, there is a growing divide in terms of skill sets and education levels. The percentage of low-skilled positions will decline across all industries as green jobs take the place of non-green jobs. In contrast, the proportion of high- and medium-skilled jobs will rise. Construction, transportation, and public administration will see the biggest growth in the proportion of high-skilled occupations.xviii The production of chemical products, of other non-metallic commodities, and the production of automobiles and other vehicles are the sectors that are anticipated to undergo transformation. These industries collectively provide significantly more jobs than the industries predicted to shrink, primarily the fossil fuel industry. Some of them will be changed, enabling workers to move within the industry they are already engaged in while utilizing their current skills.xix

Regional differences

The uneven distribution of these declining or changing sectors across European regions is a major problem to be addressed. The transition will have a disproportionately detrimental impact on regions that depend largely on these industries for economic development and job creation. First and foremost the coal extracting regions, as well as those that rely more broadly on the extraction and production of fossil fuels, are those that are most at danger of major disruption in the short future. Countries in Eastern Europe, such as Poland, will be particularly affected by these changes. Additionally, when the automobile, steel, chemical, and other industries shift to low-carbon processes, a large number of locations will have comparable difficulties in the medium and long years. Given the size and scope of the required modifications, it is incredibly difficult to pinpoint precisely which areas would be affected the worst.^{xx}

Austrian perspective

For decades, there have been projects in Austria dedicated to the energy transition and cooperation with communities, so as not to leave them behind. One such project is "OÖ Energiesparverband", a regional energy agency in Upper Austria, which was founded in 1991. Due to the manifold challenges the energy transition has on people and communities, it offers various services to assist them in this process. In this context, training for individuals, and consulting and project support for municipalities are particularly noteworthy. These all have the goal of providing both communities and individuals with the best possible support in their energy transition and of conveying skills that will enable them to be successful in the new energy system.^{xxi}

Policy considerations:

Labor force transition

It follows that sectors with the largest mismatches would require the most rigorous social policy initiatives. Upskilling and reskilling may be successful in industries where employment with low skill levels are mostly being replaced by jobs with medium skill levels. However, early retirement policies in conjunction with initiatives to train young people may be more effective in industries where low-skill occupations are being displaced by high-skill employment. A short-term skills gap, particularly at the regional level, will necessitate thorough planning and involvement by public authorities.^{xxii}

Holistic approach to communities

Engaging relevant communities before and during the transformation process is crucial for policymakers. This not only enables the development of customized policies that take into account local characteristics, but also serves as a means of fostering trust among the various stakeholders. As a result, it should generally be preferable for regional or local authorities to design equitable transition strategies in close coordination with impacted communities and workers. It's important to analyze local circumstances because they could have repercussions for a desired smooth transition. This can be accomplished during the policy-making process by establishing a commission, task force or body in charge of meeting with the communities affected to consider their considerations, better comprehend the local circumstance, and establish a space for dialogue for the relevant stakeholders. The establishment of regional transition hubs, comparable to a job center, is one strategy for supporting workers and communities during the transition.^{xxiii} The primary reason for a precise, long-term, and enforceable schedule for phase-outs is that it sends a clear regulatory signal to those affected, providing them time adjust. Workers are also given the opportunity to prepare for their future, both in terms of chances for further education and employment.

Transparent planning

Individual national phase-out schedules should be established and enterprises be required to present plans for asset shutdowns and labor management strategies in conformance with the local phase-out schedule. This may incentivize businesses to begin early planning for internal employee relocation and retraining methods, as well as early engagement with relevant stakeholders. Establishing goals that need to be met is essential for a number of reasons, not the least of which is the fact that doing so provides a safeguard against the possibility of policy reversals as a consequence of government changes. In the absence of this, social and labor programs could be terminated with little or no prior notice, leaving employees and communities without the necessary means to assist them in transitioning. Last but not least, just transition programs should be routinely and thoroughly evaluated and then be modified in accordance with the findings of these studies. It would further contribute to interregional knowledge exchange if statistics on the performance of just transition strategies in various European countries were made publicly available. In general, having transparent communication on long-term objectives and conducting scientific evaluations of just transition programs will make it possible to reform policies and better direct funding where it is needed.xxiv

Challenge 3: Pushing the European Green Deal beyond European borders

Another problem the EU faces is that even if it achieves its ambitious goals of the European Green Deal, it will not be enough to curb global warming. Since the EU is only responsible for a fraction of global GHG emissions, Europe's climate protection goal cannot be fully realized on its own. Accordingly, it is in the EU's interest not only to take a leadership role, but also to motivate other countries to commit themselves more seriously to the goal of climate action. Since it is predicted that global population growth will be particularly strong in Asia and Africa, and that consumption and energy demand there will increase accordingly, these continents are particularly relevant for an expansion of the European Green Deal if the EU's climate goals are to be achieved. Regarding this challenge, it must be examined to what extent it is possible to create synergies between member states and different European institutions in order to work more efficiently toward desired goals in third countries without heavily relying on controversial policies such as tariffs. In order to better illustrate the complexity of the European Green Deal for third countries and to show which further implications, for example of a geopolitical and economic nature, they entail, I will focus on one single country in this paper due to its relevance for the EU

as a whole. This country is Russia, since, in addition to the reasons just mentioned, it is also a major energy exporter to Europe and thus a change in relations is to be expected as a consequence of the desired decarbonization goals. Through such a case study, I hope to better demonstrate that country-specific factors have a strong influence on the external consequences of the European Green Deal, that they have repercussions for the EU and to showcase how the European Green Deal can be externalized by nudging other countries to decarbonize as well. Since many factors, not least the geopolitical environment, that are not directly part of climate policy can have an impact on its success, I will also present a brief outline of these to provide a more holistic analysis.

The Nature of EU-Russia relations

Past days' hopes of accommodating Russia in a productive way within the European community never materialized, as the West's relations with Russia increasingly deteriorated after the turn of the century. Many times Western European (and American) leaders sought to "reset" relations with Russia, resulting in nothing substation to show for. Russia's track record shows clearly that it seeks to undermine Western societies' internal cohesion as well as NATO's and the EU's unity, intrude on neighbor's territorial integrity and restore what they perceive as a past days of national greatness. Realistically, so long as the current autocratic, revisionist government remains in power, Russia resembles more a problem that has to be managed than a productive partner. For the moment, the soundest strategy for the West at large and EU in particular, is two-pronged:

- Reduce Russia's leverage over others so that there is as little room as possible for malign activities and coercion
- Increase one's own leverage over Russia to better safeguard and promote the EU's interest

Even though the European Green Deal is primarily framed as a EU-internal project to achieve climate neutrality by 2050, it has nevertheless far-reaching geopolitical implications. It can fit neatly into the recommended Russia strategy if the EU is willing to realize its full geopolitical potential.

European Energy Reliance on Russia - The Status Quo

Russia is by far the largest gas supplier for Europe - in 2019, it supplied 43% of the EU's total gas imports.^{xxv} However, dependence varies greatly from country to country. While some in Western Europe import relatively little gas from Russia, the share of Russian gas increases gradually as one moves eastward. In total, 15 EU member states, mainly in Eastern and Central Europe, cover more than 50% of their domestic gas consumption with Russian gas.^{xxvi} The fact that Russia is taking advantage of this dependence is not just a theory, it is a demonstrated practice. No less than 18 times in the last 30 years, Russia has cut deliveries, stopped them at short notice, or raised prices in order to realize the Kremlin's strategic goals.^{xxvii} The two best-known incidents were the politically motivated interruptions of gas supplies

to Ukraine in 2006 and 2009, which led to supply disruptions throughout Europe. This demonstrates that gas and oil are not just commodities like any other, but carry geopolitical implications. Nevertheless, energy dependence does not have to be permanent if the right set of policies are pursued. A prime example of such effort is the European Green Deal. It aims to change Europe's economy from the ground up, but also carries far-reaching energy and geopolitical implications. Its primary goal is to make the EU carbon-neutral by 2050 and to reduce emissions by 50-55% by 2030 from 1990 levels.^{xxviii} The efforts toward these have wide-ranging implications for EU-Russia relations.

Three goals in particular of the EU's Green New Deal have far-reaching implications for the geopolitical landscape between the EU and Russia: Decarbonization of the energy sector, externalization of the European Green Deal and the focus on emerging technologies. Both the stated goals of increased energy efficiency and the reduction of fossil fuels mean one thing above all for Russia in the long term: a reduction in its energy exports to Europe. This confronts the Russian state with the challenge that the largest export market of its monolithic economy will break away.^{xxix}

Policy considerations

Decarbonization

Renewable energy cannot yet displace baseload production due to the intermittency problem and the lack of large-scale storage capacity. The available options to cover baseload production are fossil fuels, hydropower and nuclear energy. Hydropower cannot contribute to baseload production further, as it lacks room for expansion in most of Europe and due to environmental concerns.xxx Nuclear energy would constitute a low-emission energy source, but is not viable for political reasons on a large, EU wide scale, owing to strong anti-nuclear sentiment in many European countries.xxxi The other main options for baseload generation are coal and natural gas. Since power generation by coal emits significantly more CO2 than natural gas, most countries are aiming for a phase-out of coal by 2030.xxxii Consequently, only gas remains to fill this vacuum and Russia stands to benefit the most, assuming the European trade-off between energy security and prices remains unchanged. The reduction in European gas production, mainly in the UK and the Netherlands, will further increase the EU's import dependency.xxxiii Nevertheless, this continued dependence and vulnerability can be mitigated to some extent by the right policies. These include the construction of further storage facilities and expansion of reverseflow pipelines, where needed. Even though much has been achieved in the area of reverse-flow pipelines since Russia used the gas-weapon against Ukraine in 2006 and 2009, illegally seized Crimea and sponsored irredentism in the Donbass, there is still room for improvements. Even though Ukrainian EU membership remains at best a long-term prospect, ensuring its stability and independence in the face of Russian aggression remains a key interest of the EU. To ensure Ukraine's energy security and therefore reduce Russia's leverage over it, additional pipelines from Ukraine to the EU should be adjusted to allow reverse flows.xxxiv

Externalization of the European Green Deal

The second factor that will directly affect Russia is the fact that the EU is not content to pursue its goals within the community but aims to promote them externally. In addition to the stronger focus on financing sustainable projects, two major initiatives are noteworthy: The EU Methane Strategy and the Carbon Border Adjustment Mechanism (CBAM).^{xxxv} The EU Methane Strategy seeks to slash methane emissions, which are the second biggest contributor to global warming after CO2.xxxvi The energy sector is responsible for most methane emissions, particularly as a result of methane leakage in oil and gas production and transportation. Internationally, Russia's methane emissions from its oil and gas production are bigger than those of any other country.xxvii Together with international partners, the EU seeks to set standards and limits to methane emissions. So far this has cumulated in the Global Methane Pledge. This international initiative, spearheaded by the EU and the US, will officially launch at COP26 in Glasgow and aims at cutting methane emissions worldwide and supporting developing countries in doing so.xxxviii CBAM on the other hand, serves the purpose of preventing carbon leakage, i.e. the relocation of production to other countries in order to avoid stricter climate protection measures. To this end, products from third countries whose production is more carbon intensive are taxed when imported so that domestic production, which is subject to the carbon price regime, does not suffer a competitive disadvantage. Russia, whose economy is notoriously energy inefficient and carbon intensive, is likely to be particularly affected, not least because the EU is its biggest trading partner.xxxix CBAM and the European Methane Strategy can be powerful tools in the hands of the EU, especially if it follows through on President of the European Commission von der Leven's promise to leverage the EU's weight to promote its geopolitical interests. As outlined earlier, Russia's industries are energy inefficient, its oil and gas sector's methane emissions are staggering and it is slow to implement policies tackling this issue. Besides that, Russia lacks both the capital and the know-how to extensively decarbonize on its own or reduce methane emissions substantially, relying on foreign investment and expertise to fill that void.^{xl} That puts Russia in a disadvantageous position. Due to CBAM, Russia must choose between their exports losing competitiveness on the European market or decarbonizing their exporting industries with the help of outsiders. Many EU countries are among the international leaders in decarbonization, and capital is available as well. Therefore, European assistance for Russia in its decarbonization process could be leveraged in order to get concessions from Russia, be it ending meddling in European elections or stopping their saber rattling and adventurism. A similar tradeoff could be found for helping Russia reduce its methane emissions. Due to Russia's reliance on the EU market to sell its commodities, it will have to comply with binding methane standards in the market. Unlike CBAM, however, the EU's upper hand isn't as clear-cut when it comes to the methane strategy. As outlined earlier, the EU will continue to rely on Russian gas in the short to medium-term if it is not willing to pay the higher price for LNG. Therefore it's also in its own interest that Russia meets whatever methane standard it might set, limiting the extent to which it can leverage it. Even if the Russian regime were to resist economic pressure to decarbonize, that would most likely still be a good outcome for

the EU. The foreseeable decarbonization of European energy and the import taxes on Russian carbon-intensive goods both have one thing in common: A reduction in Russian revenues. Following the Western sanctions imposed as a result of the illegal seizure of Crimea and downing of MH17, Russia has already tried to tap new markets. However, the results of this endeavor have been mixed, and it is questionable to what extent emerging markets can represent an alternative for the European market.^{xli} From a European geopolitical perspective, a reduction in Russian revenues tends to be a good thing. Less money coming in from energy means less money to spend on military adventures. The Russian revanchism and militarism would be difficult to imagine without Russian government budgets overflowing as a result of high energy prices.^{xlii} A Russia that has less revenue is also one whose trade-off between guns and butter is becoming more fraught and whose military adventurism is more difficult to sustain.

Cooperation, if desired: Emerging technologies

Nevertheless, the European Green Deal also has the potential to lead to increased cooperation between the EU and Russia, to some extent at least. Russia, with its immense underutilized land and existing pipeline network, has enormous potential not only for renewable energy and hydrogen, but also for CCUS. If, as many suspect, hydrogen will be the technology of the future, with its potential to store energy from renewable sources and make it transportable, then Russia would be in a formidable position to continue exporting energy as a result of European technological cooperation and investments.^{xliii} This would, of course, raise the question of how far Europe would become dependent on Russian energy. Furthermore, it would theoretically be possible to use depleted oil and gas reservoirs for the storage of European CO2 emissions or to offset them through deforestation in Russia. Against the backdrop of the current tensions between the West and Russia, these avenues seem unlikely at present. However, if the goal is to overcome antagonism, these areas would lend themselves to cooperative projects.

Conclusion:

Given the ambitions of the European Green Deal, it is clear that it poses a number of challenges. Such a transformative endeavor has implications on many levels, be it the distribution of wealth in society, the socio-economic consequences for communities and countries, or the EU's relationship with third countries. Regarding the distribution of the burden of the European Green Deal, some policy recommendations were identified. First and foremost, the relief of low-income earners through appropriate measures that accompany a carbon price should be highlighted in this context. A green transformation can only succeed if the additional burden is distributed as fairly as possible. One Austrian initiative that can serve as a model for other countries is the "Klimabonus", which aims to do just that. The second aspect that was examined in more detail was that of labor market changes. The general trend away from low-skill jobs in carbon intensive industries to medium- to high-skill jobs in green industries has the potential to lead to social upheaval.

Consequently, additional measures need to be taken to best support communities and people during this transition. In particular, early up- and reskilling is a key to mitigating the opposite effects. A best practice example from Austria is the "OÖ Energiesparverband", which is a regional institution offering site-specific support for communities and companies. The last factor analyzed was the externalization of the European Green Deal and its consequences for European foreign relations. In the long term, the European Green Deal will mean that the EU will be less dependent on fossil fuel imports from third countries, above all Russia. This will take away Russia's leverage in energy control to exert pressure on EU member states. As the example of Russia shows, the European Green Deal has consequences that go beyond the actual climate goals. Due to the geopolitical and economic consequences of decarbonizing Europe, it is to be expected that Europe will gain weight in certain external matters. Measures such as the CBAM can also put pressure on third countries to provide incentives for setting and complying with stricter climate targets.

Endnotes:

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ⁱⁱⁱ McKinsey, "How the European Union could achieve net-zero emissions at net-zero cost", accessed April 20, 2022, <u>https://www.mckinsey.com/business-functions/sustainability/our-insights/how-the-european-union-could-achieve-net-zero-emissions-at-net-zero-cost</u>

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