



# KONFERENCIAKÖTET

## Conference Proceedings

**Nemzetközi tudományos konferencia  
a Magyar Tudomány Ünnepe alkalmából**  
International Scientific Conference  
on the Occasion of the Hungarian Science Festival

**Sopron, 2023. november 23.**  
23 November 2023, Sopron

**FENNTARTHATÓSÁGI ÁTMENET:  
KIHÍVÁSOK ÉS INNOVATÍV MEGOLDÁSOK**  
SUSTAINABILITY TRANSITIONS: CHALLENGES AND INNOVATIVE SOLUTIONS

Szerkesztők / Editors:

OBÁDOVICS Csilla, RESPERGER Richárd, SZÉLES Zsuzsanna, TÓTH Balázs István

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## The EU as a “Leadiator” in Climate Governance - a Successful Soft Power Instrument? An Analysis with a Focus on Sustainable Mobility

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### **Abstract:**

The European Union is often lauded as a leader (or “leadiator”) in international climate governance the most prominent output of its engagement being 2015 Paris Agreement. Climate governance could be a core element of the EU’s soft power. One prerequisite to project soft power is credibility - policies should translate into measurable outputs at member state level. This is especially crucial regarding mobility which is responsible for around 25% of overall CO<sub>2</sub>-emissions within the EU and internationally. It is questionable, however, whether this is the case: emissions have not gone down considerably since the 1990s as current systems have proved to be rather resistant to change. The proposed paper analysed whether the EU is able to propagate its soft power in climate governance through analysing progress within the EU. To assess this, climate action in the field of mobility was analysed through a literature review. The main conclusion was that climate governance can indeed function as a soft power instrument but that effectiveness hinges on successful implementation at home.

**Keywords:** EU climate governance, sustainable mobility, soft power, climate neutrality 2050  
JEL Codes: Q54, Q56

### **1. The EU’s role in climate governance**

Anthropogenic climate change is without a doubt one of the key challenges of our time. This is, among other issues, due to the fact that it requires changes in our modes of living as well as our patterns of mobility, consumption and production at a hitherto unseen scale and must be mitigated collectively. The European Union is therefore an actor especially apt for this task given that it was created to tackle issues that are better solved collectively than individually and pursues a distinctive multilateral approach when it comes to international affairs.

This is also true in the field of environmental and climate issues: In fact, the European Union is often described as a leader in international climate governance because it put the topic on the international agenda in the early 1990s and has been advocating for ambitious policies at the international level ever since in an attempt to maintain this role (Huber et al., 2020; von Homeyer et al., 2021). The most prominent output of this engagement hitherto is the 2015 Paris Agreement agreed on at COP21 and during the negotiation of which the EU played a key role (Karlson et al., 2017). Consequently, climate policy could be seen as an important part of the EU’s soft power approach towards international relations - alongside its neighbourship policy and economic clout. This is especially important considering that the EU does not possess hard power it could leverage so as to reach its foreign policy goals (CES, 2023).

But proposing ambitious goals at the international level is not sufficient for being a “leadiator” in climate governance (Oberthür & Dupont, 2021) – a role that is central for using climate action as a soft power tool. Rather, to maintain credibility, it is indispensable that targets translate into measurable outputs not only at the global, but also at the domestic level. While EU proposals to create a more sustainable economy and society have been manifold – the most

recent and lauded one being the European Green Deal (EGD) (European Commission, 2019) - and substantial progress has been made in fields like renewable energy, this is not true in all sectors making a significant contribution to climate change.

One field of special concern is mobility as it is responsible for a sizable chunk of overall CO<sub>2</sub>-emissions, making up around 25% of overall emissions (European Commission, 2021a). Therefore, making mobility more sustainable is crucial for reaching the targets set by the Paris Agreement and subsequently the EGD. Despite efforts, emissions have not gone down considerably since the 1990s as current systems have proved to be rather resistant to change (Creutzig et al., 2015). This leads to the question of whether the EU can actually use its climate governance in the field of mobility as part of its soft power approach. This is the main question this paper tries to address via a comprehensive literature review of the EU's progress.

## **2. Description of the topic and literature**

The given research is based on a variety of concepts such as climate governance, (sustainable) mobility and soft power according to Joseph Nye (2017) as a foreign policy approach. These terms shall be defined briefly before turning towards actual results concerning decarbonisation in the mobility sector and their implications on soft power in the next chapter.

### ***2.1. Sustainable mobility as a key part of EU climate governance***

In a general sense of the term, governance stands “for any strategy, process, procedure or program for controlling, regulation or managing problems on a global, national, local or organisational level” (Lemke 2007: 53). It is most commonly used with regard to issues that call for global (and/or) regional solutions and implies the different levels of polity, policies and politics (Betts 2011). Some scholars focus more narrowly on the tasks fulfilled by governments and therefore define governance as “the exercise of steering and control mechanisms for the purpose of maintaining the stability and order of the society in which it operates” (Whitman 2005: 16). Governance can thus lead to formal policies like laws or to more informal approaches to managing a problem. While the nature of the EU's political system is subject to debate, scholars agree that it operates within a multi-level governance framework (Knodt / Große Hüttmann 2012; Scharpf 1997). Within this framework, ambitions and normative claims have been high, even though this has not always translated into actual governance transfer (Börzel/van Hüllen 2015). One sub-field of governance of special importance is climate (change) governance. Climate governance is often considered a wicked policy problem given that it impacts a wide range of fields and keeping it in check (mitigation) as well as adapting to its effects requires ambitious efforts. Thus, climate change is “a (global) governance challenge par excellence, since the actions of all states, corporations and individuals in this domain often have transboundary consequences on all others regardless of territorial boundaries” (Coen / Kreienkamp / Pegram 2020: 1).

Mobility is an inherent element of modern life in a globalised society that is closely linked to climate change. As spatial orientation has changed due to industrialisation and the new modes of transport like rail, aviation and the automobile, mobility and transport patterns have changed (Sheller/Urry 2006). While mobility is not necessarily mobile, transport as a broader concept is a precondition for mobility (Banister / Givoni 2013). Nowadays, transport is mainly based on fossil fuels and accounts for over 61% of global oil consumption, making up around 24% of global CO<sub>2</sub> emissions (Banister / Givoni 2013: 4). With around 25% of overall emissions, the EU's mobility emissions do thus correspond to the global average (European Commission, 2021b). To mitigate climate change, it is therefore indispensable to lower emissions in the mobility sector by making the technologies used and usage patterns more sustainable. So-called

sustainable mobility can be achieved through a shift in mobility patterns brought about by new social norms and changes in the economic growth model, decarbonisation of current transport technologies (e.g. electro mobility or hydrogen powered vehicles) or invention of low-carbon technologies (Banister / Givoni 2013). Policy makers in the EU generally tend to shy away from radical system change that would be needed for changing mobility patterns. Instead, they pursue a “green governmentality approach” (Dyrhaug 2021) - that is making existing mobility infrastructure more sustainable - and thus perceive the wide-spread introduction of E-mobility as the way to go. This, in turn, however, requires considerable investment and new “distributed, open and transparent” infrastructure (Rifkin 2018: 29) - not only in mobility infrastructure but only regarding energy sources. It is thus debatable whether such solutions are sustainable in the long run.

**2.2. Soft power and the EU**

The term soft power, a core element of this research, was first coined by Joseph Nye, an American political scientist in the early 1990s. He argues that a nation's power is not solely determined by its hard power – that is military or economic strength –, but also by its “ability to affect others by attraction and persuasion rather than just coercion and payment” (Nye 2017: 2). The strategic combination of hard and soft power is often referred to as ‘smart power’. Soft power can thus be understood as a form of non-coercive influence that a country wields through attraction, persuasion, and the ability to shape preferences. This is therefore of special importance for actors to which hard power is not available. This is especially valid for the EU as an actor “sui generis” (Eriksen 2009: 1) and normative power (Manners 2002) needs unique ways to project its power. Concerning its role on the world stage, the European Union is sometimes ironically characterised as “an economic giant, a political dwarf, and a military worm” (Whitney, 1991). This description was first used by Belgian Prime Minister Mark Eyskens back in 1991 to criticise the continent’s incapability of acting when faced with external crises, in this case the first Gulf war. Given that Eyskens made this statement at the beginning of the 1990s, i. e. at a time before the EU gained juridical personality and successively enlarged its competences, it is conceivable that the EU may have developed its capabilities in political and military terms in the meantime. Even so, it still primarily relies on soft power to pursue its goals and values. According to Nye, soft power has various key elements that are summarised in the following table for additional clarity (Table 1).

**Table 1: Elements of soft power according to Joseph Nye**

Area relevant for soft power	Definition
<b>1. Culture and values</b>	appeal of a country's culture, values, and way of life (e.g. music, literature, film, language, way of life)
<b>2. Political Ideals and Institutions</b>	attractiveness of a country's political ideals and institutions (e.g. democracy, rule of law, good governance)
<b>3. Foreign Policy and Diplomacy</b>	effective diplomacy, international cooperation, positive engagement with other countries (e.g. alliances and partnerships)
<b>4. Education</b>	quality of a country's education system and its ability to attract international students
<b>5. Media and information</b>	ability to shape the global narrative through media
<b>6. Economic Success</b>	economic strength and innovation reflecting a country's ability to provide prosperity and opportunities
<b>7. Global Leadership and contribution to global issues</b>	leadership role in addressing global challenges (e.g. climate change, public health, and poverty) build credibility and influence

Source: Own representation (2023) according to Li (2018), Nye (2017) and Nye (2021)

In sum, soft power is often seen as a complementary aspect to hard power, and Nye argues that a smart strategy for a nation involves a judicious combination of both. Soft power is about shaping preferences, building relationships, and gaining influence through attraction and persuasion rather than coercion. This does not mean, however, that soft power cannot involve at least a degree of coercion - it is rather “a matter of degree along a spectrum of behaviours that range from the hard end of command to the soft end of co-option” (Nye 2021: 7). It is therefore not surprising that as a tool, soft power has its limitations. It is not something that can be used by states at will. Rather, it requires credibility through leading by example as well as the involvement of civil society (Nye 2017: 3).

So how does the soft power concept relate to climate governance? As Table 1 shows, there are different areas where climate governance can be linked to soft power. The most important element is without a doubt policy leadership (7). Implementing and advocating for strong climate policies at home underscores a commitment to tackling climate change. Setting and ambitious emissions reduction targets, implementing effective policies, and achieving progress in mitigating climate impacts can inspire others and gain admiration on the global stage. Given that climate change cannot be tackled by an actor or region alone, international cooperation is indispensable. This offers another area for Considerable efforts in fostering international cooperation and diplomacy (3.) on climate issues demonstrates an actor's commitment to the survival of the humanity and the planet it depends on for survival. Furthermore, participating in climate agreements, conferences, and negotiations provides opportunities to build diplomatic relationships and alliances with other nations, which in turn may enhance a country's reputation and influence on the world stage. Innovation leading to economic success (4. & 6) may also play a key role in enhancing soft power given that leading in green technologies, sustainable practices, and clean energy showcases a region or country forward-thinking, environmentally responsible, and technologically advanced. In order to reap most of the benefits, effectively communicating climate actions through public diplomacy initiatives and media campaigns to a global audience is key (4).

In short, climate governance can be easily leveraged as a soft power instrument if used effectively. Soft power in the context of climate governance is mainly about leading by example, fostering cooperation, and positively shaping perceptions on a global scale.

3. Are the EU's actual efforts in decarbonising mobility sufficient as an element of soft power?

As became clear in the previous chapter, climate governance could without a doubt be an important element of the EU's soft power. In fact, the EU is often already seen as a “leader” in climate governance. It was also made clear, however, that for climate governance to be successful as a soft power tool, leading by example is key. It is therefore indispensable for EU soft power to work that the ambitious goals the EU has set with regard to decarbonization are met. The following chapter is therefore dedicated to an analysis of the EU's efforts in the field of climate governance - first in general and then with regards to mobility in particular - so as to draw conclusions regarding its viability as a soft power instrument.

### ***3.1. EU's climate governance in general***

The EU has significantly stepped up its climate commitments in the last couple of decades and it is not for naught perceived as a leading actor in international climate governance. Scholars have studied the EU's climate governance and its evolution extensively - the main finding being that the EU has long adhered to an incremental approach strengthening climate targets step by step (von Homeyer et al., 2021; Jordan et al., 2010; Skjærseth et al., 2016). Furthermore, the

EU has set remarkable policy signals that underline its willingness to bring about meaningful change (Dyrhaug, 2021). Despite the limited amount of EU legislative power in fields outside those concerning the common market (Fitch-Roy & Bailey, 2022), nowadays, climate policies cover “nearly all relevant policy fields” (von Homeyer et al., 2021:4). As programs and plans of action have been abundant, the following table aims sums up the most important measures in European climate governance (Table 2).

**Table 2: Main measures of EU climate governance**

Year	Measure	Main achievements/goals
2001	Renewable Energy Directive (RED) - RED 2001/77/EC (renewed several times)	<ul style="list-style-type: none"> <li>– Rising share of renewable energy sources in EU energy consumption</li> <li>– Outcome: increase from 12.5% in 2010 to <u>23% in 2022</u> with large variations among member states (European Commission, 2023b)</li> </ul>
2005	Launch of the European Emission Trading System (EU ETS)	<ul style="list-style-type: none"> <li>– Price tag for CO<sub>2</sub> emissions</li> <li>– subsequent enlargement to further sectors (transport, housing) as well as rising prices per certificate</li> <li>– Signalling effect at the global level</li> </ul>
2012	Energy Efficiency Directive (EED)	<ul style="list-style-type: none"> <li>– Legally binding targets for increased energy efficiency</li> <li>– Updated in 2018 and 2023</li> <li>– Goal: 11.7% reduction in energy consumption by 2030 through increased efficiency</li> </ul>
2014	2030 Climate and Energy Framework	<ul style="list-style-type: none"> <li>– Outlining emission-reduction targets for the period from 2020-2030</li> <li>– Non-binding</li> <li>– Focus on EU climate and energy policies (European Council, 2014)</li> </ul>
2015	Paris Climate Agreement	<ul style="list-style-type: none"> <li>– EU signed the agreement alongside 194 other member states</li> <li>– Goal to keep temperature increase due to climate change below the threshold of 2 (ideally 1.5°C)</li> <li>– Member states set national emission reduction goals (EU lacks the measures to enforce these)</li> </ul>
2018	Effort Sharing Regulation (ESR) (ESR 2018/842/EU) Land Use, Land Use Change, and Forestry (LULUCF) Regulation	<ul style="list-style-type: none"> <li>– ESR set national targets for emission reductions from road transport, heating of buildings, agriculture, small industrial installations and waste management</li> <li>– LULUCF set targets for agriculture</li> </ul>
2019	European Green Deal (EGD)	<ul style="list-style-type: none"> <li>– Non-binding policy programme of the European Commission with the aim of achieving stronger climate policy integration and climate neutrality by 2050</li> <li>– Signalling effect to other countries globally</li> </ul>
2021	European Climate Law	<ul style="list-style-type: none"> <li>– Legally enshrined the EU's commitment to climate neutrality by 2050 proposed by the EGD</li> <li>– Binding target of net greenhouse gas emissions reduction by at least 55% by 2030 compared to 1990 levels</li> </ul>
2023	Fit for 55 Package	<ul style="list-style-type: none"> <li>– Revised effort sharing regulation</li> <li>– EU-level greenhouse gas emission reduction target of 40% by 2030, compared to 2005 for all sectors</li> </ul>

Source: Own representation (2023)



As the table shows, the EU's ambitions with regards to climate policy have constantly increased in scope. The European Green Deal and the European Climate Law provide an overarching and forward-looking framework for the EU's climate ambitions. The EU's capacity to act has significantly increased as non-binding targets focused on specific sectors are only step by step transmuted into legally binding targets. Furthermore, climate policy integration also has evolved significantly, a main outcome of this being the EGD which calls for complete decarbonisation by 2050. As of 2023, this process culminated into the European Climate Law which enables the EU to coerce member states in case of non-implementation. It stands out that, in general, policies have a strong focus on mitigation, while adaptation has been less developed. In order to foster implementation, member states had to elaborate National Energy and Climate Plans (NECPs) that are reviewed periodically (von Homeyer et al., 2021). This is especially valid for the energy sector on which most of the legislative acts before the EGD had been focused.

Despite all the progress that has been made on policy level, however, challenges to decarbonisation remain manifold. While change has been profound in sectors like energy, this is not true for others like the mobility-transport nexus (Dupont & Oberthür, 2015). In the past, the EU managed to achieve its targets even ahead of schedule despite the various crises it faces. It is questionable, however, whether this trend will continue given that more accessible gains in renewables and energy efficiency have been reaped while little progress has been made in highly interconnected areas like mobility, as shall be outlined in more detail in the next chapter. Reaching the 2050 zero-net emission targets requires ambitious efforts and it is up to debate whether they will be reached in time (EEA, 2020).

**3.2. EU's climate governance within sustainable mobility**

As became clear in the previous chapter, the EU has consistently stepped up its action with regard to climate governance. Efforts, however, have been spread out unevenly among sectors. One sector of special concern is the mobility-transport nexus. Despite being responsible for around 25% of overall CO<sub>2</sub>-emissions in the EU (European Commission, 2021a), the mobility-transport nexus “has made no contribution to those [emission] reduction targets” (Banister/Givoni 2013: 5). Additionally, mobility has not been at the forefront of EU climate actions. As becomes clear when looking at Table 2, the ESR 2018 was the first measure to name transport emissions specifically. Before, most legislative acts were focussed on the energy sector and mobility was only vaguely included in the overall emission reduction scheme. NECPs under the EDG, for example, set concrete goals for renewables and energy efficiency while remaining silent on other salient issues like how to achieve sustainable mobility except for a commitment to foster the use of renewables in the transport sector. Even so, it finally set a target of lowering mobility emissions by 90% until 2050. To complicate matters even further, simultaneously, demand for transport and mobility has soared, as the following figure shows:



**Figure 1: Changes in Demand for Transport (2000-2019)**  
Source: EEA (2024)

Given this rather dim picture, the following question comes up: How could sustainable mobility be achieved within the EU and which approach do policy makers pursue? As mentioned in chapter 2.3, there are two main ways of achieving sustainable mobility - ‘greening’ existing mobility solutions or changing mobility patterns. Policy makers in the EU generally tend to shy away from radical system change that would be needed for changing mobility patterns. Instead, they pursue a “green governmentality approach” (Dyrhaug 2021) - that is making existing mobility infrastructure more sustainable - and thus perceive the wide-spread introduction of E-mobility (and possibly hydrogen) as the way to go. This, in turn, however, requires considerable investment and new “distributed, open and transparent” infrastructure (Rifkin 2018: 29) - not only in mobility infrastructure but only regarding energy sources. It is thus debatable whether such solutions are sustainable in the long run as e-mobility is not free of emissions. Instead, decarbonizing mobility and transport via electrification requires new infrastructure and has important geopolitical implications like an increased dependence on Rare Earth Elements (REE) originating mostly from countries like China. Considering this lack of direction and concrete goals, it is not surprising that member states have not been prompted to act on the subject.

A step towards progress with regard to sustainable mobility through setting more concrete goals for the mobility sector was the ‘Fit for 55 package’. The package includes a set of proposals to revise and update EU legislation to make reaching climate neutrality a real possibility (European Council ,2022). Especially relevant for the mobility-transport nexus are the aims to reform the ETS by including emissions caused by buildings and road transport - a measure which is expected to lead to an emissions reduction of 43% by 2030 if compared to 2005. Further important measures are the CO<sub>2</sub> emissions standards for cars and vans as well as a ban on the sale of cars with an internal combustion engine by 2035 and to expand the alternative fuels infrastructure. Further important measures include the Alternative Fuels Infrastructure Regulation (AFIR).

### **3.3. Key findings**

Addressing climate change effectively across different fields is one of the key challenges institutions and policy makers are currently facing. This is especially true for those actors that – like the EU – rely on soft power to project their values and ideals due to a lack of hard power resources. Finding timely solutions to problematic fields like sustainable mobility will give the relevant actors a strategic advantage not only with regards to climate policy but might also allow them to strengthen their soft power in other fields as well.

The analysis has shown that on a policy level the EU has been and is a key player in shaping the transition towards a more sustainable economic and social model for its member states and beyond. Reaching the 2050 zero-net emission targets, however, requires ambitious implementation efforts and it is up to debate whether they will be reached in time (EEA 2020). The EU’s strong role on the policy level is not matched by corresponding action on the ground. Despite general emission reduction targets, emissions in the mobility sector have not gone down. Instead, they even have increased by around 10% as compared to the reference year of 1990 due to a rise in individual mobility. It must be mentioned, however, that achieving emission reductions in fields that are as interconnected as mobility, however, is challenging within a multi-level governance system. While the EU is at the forefront when it comes to designing policies, it has little impact on actual implementation of climate policy given that as a supranational actor without its own authority to act, it lacks the means to actually enact the transformation that would be necessary. Whether EU policy translates into measurable emission reductions depends primarily on the member states and motivations among them vary widely. This is aggravated by the fact that mobility is a policy field that is influenced by and influences other

fields such as economic policy, urbanism, the labour market, etc. Given the complexity of the task and the lack of agency the EU has, it comes as no surprise that only little progress with regard to emission reductions in the mobility emissions is visible. The multi-level governance framework enables member states and other actors to avoid making the necessary changes. Before the European Climate Law came into force, the EU lacked the necessary means to insist on implementation on member state level given that the European Green Deal was mainly a policy program that the European Commission came up with. The EU's agency has thus been strengthened through the European Climate Law as it obliges member states to set binding targets in their national long-term strategies.

To put it into a nutshell: in theory, the EU would be in an excellent position to present itself as a global leader and contributor by tackling climate change through significant progress in the field of sustainable mobility. In practice, however, a key element that would be needed to use EU climate governance as a successful soft power element is missing - leading by example. It is questionable whether the EU as an actor on its own has the capacity to remedy this shortcoming as long as member states lack the willingness to act.

#### 4. Conclusion

The given paper set out to analyse whether the EU is able to use its action in the field of climate governance as a soft power instrument. Given that the least progress has been made with regards to (sustainable) mobility - despite a share of 25% of overall emissions -, this area was chosen as a focus. It has been found that theoretically, the EU could use climate governance as an important element of its soft power. On the one hand, the EU has positioned itself successfully as a role model in the field of climate governance. On the other hand, sustainable mobility is a field where solutions are being sought after and coming up first would be of strategic importance to the EU as it might allow it to 'lead the way' in other key policy areas as well. In practice, however, the effectiveness of this instrument is considerably hampered by the fact that progress has yet to be made at member state level, which in turn hampers the EU's credibility. Despite the EU's ambitious commitment to climate neutrality by 2050 as prescribed by the Climate Law and the national long-term strategies, emissions are stagnating instead of going down. Visible progress in the field of sustainable mobility happening in the near future is therefore indispensable if the EU wants to keep using climate governance as a soft power tool.

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