

#FocusFuture

The **7D_s**
for Sustainability

Debt

Decarbonisation IN DEPTH

Defence

Democracy

Demography

De-risking Globalisation

Digitalisation



Wilfried
Martens Centre
for European Studies

The 7Ds for Sustainability - Decarbonisation in Depth

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Table of acronyms

ACER	Agency for the Cooperation of Energy Regulators
CBAM	Carbon Border Adjustment Mechanism
CCfD	Carbon Contract for Difference
CfD	Contract for Difference
CRM	Critical Raw Materials
CSDD	Corporate Sustainability Due Diligence Directive
EEAS	European External Action Service
EFSD+	European Fund for Sustainable Development Plus
EIB	European Investment Bank
ENTSO – E	European Network of Transmission System Operators
ENTSO – G	European Network of Transmission System Operators for Gas
ESG	Environmental, Social and Governance
ETS	Emissions Trading System
H2	Hydrogen
MFF	Multiannual Financial Framework
PPA	Power Purchase Agreement
R&D	Research and Development
RES	Renewable Energy System
SME	Small and Medium Sized Enterprise
WTO	World Trade Organization

Introduction

Peter Hefele

With its 2019 Green Deal and the goal of carbon neutrality by 2050, the EU aims to become the most influential global actor when it comes to advancing the international agenda on decarbonisation and the fight against climate change. Geopolitical conflicts have increasingly shifted political priorities and resources, making the commitments pledged in the previous decade even more challenging to achieve. At the same time, resilience and economic security have become key criteria for the future transformation.

Through its domestic and external relationships, the EU has to be able to ensure a sufficient and reliable supply of materials, fuels, technologies and skills, while meeting the energy demand of its citizens and industries in a secure, flexible and efficient manner. The benefits of the transformation project must be balanced with the need for social acceptance. Openness towards manifold innovation patterns is as important as political and regulatory predictability.

Given the gigantic financial resources needed to transform the existing fossil-based economies, the role of the private sector is crucial to making this happen faster and in a more cost-efficient manner. The volume of private investment in technology and infrastructure must be scaled up massively, as public sources will be less available due to the already high levels of debt. Due to the existing regulatory framework, financial instruments are still not sufficiently accessible for a large part of the corporate sector. In particular, small and medium-sized enterprises (SMEs) lack access to bond market investors and various sophisticated products.

For too long, issues linked to the green transition have been separated from those related to the security of raw materials. But this ignores the ways in which each set of issues is inextricably bound up with the other. This is because some of these raw materials are components essential to digitalisation, and the green transition and digitalisation are inseparably linked with each other. Ensuring a stable and affordable raw material supply chain without getting into new import dependencies, with all their geopolitical implications, requires a strategic reorientation of European politics.

The EU has to regain lost ground in the design and production of innovative clean technology. Most of the progress in this area is being made in North America and Asia, and it is there that most large-scale production is also taking place. State subsidies have distorted the level playing field and given rise to daunting challenges for European companies.

Given Europe's dwindling geopolitical and geo-economic weight, building regional and global alliances requires putting more effort into climate diplomacy, not least to open new markets for European companies in the fast-growing markets of developing countries and to support these companies' efforts in the area of sustainable development.

In 2023, the Martens Centre published its *7Ds for Sustainability* strategy document. This text comprised 175 proposals for the next legislature to future-proof EU policy in the areas of debt, decarbonisation, defence, democracy, demography, de-risking globalisation, and digitalisation. Sustainability was chosen as the guiding principle to ensure that the policies reconcile the needs of both the present and the future, and systematically include the interests of the next generations.

The *7Ds* document has already inspired reflection on what to do over the next five years. These discussions are based on Christian Democrat and conservative thinking and the available in-house expertise of the Martens Centre. For the next phase of intense discussions about the programme to be implemented during the 2024–9 legislature, the Martens Centre has invited renowned external experts to put forward their own, more extensive proposals based on the original document, thereby deepening the available expertise. It is hoped that these proposals, published at the beginning of April 2024, will help to clarify the way forward at a critical juncture, when the European Parliament, the European Commission and the European Council are negotiating on and finalising their strategic priorities.

Energy Security and Energy Resilience in the EU

Bernd Weber, Sam Williams

Recent geopolitical upheavals, including Russia's war on Ukraine and the ensuing energy and supply chain crises, necessitate a re-evaluation of industrial and energy security strategies. Energy resilience emerges as a linchpin for protecting citizens and industries by ensuring a reliable supply of materials, fuels, technologies and skills, while meeting projected energy demand. European energy resilience will only become tangible if rooted in technological innovation and green business models. Hence, we need a holistic EU industrial policy framework for innovation that extends beyond the European Green Deal.

The EU's dependence on a limited number of third countries for energy imports, renewable energy deployment and manufacturing is becoming an increasing liability. Major economies such as the US and China are advancing clean energy development to assert dominance in the green industrial revolution. Energy-intensive industries need to diversify energy supply chains, adopt sustainable business models, and prioritise efficiency and innovation.

The single market is Europe's key asset to drive down costs for the transformation, but it needs to be strengthened to deploy strategic net zero technologies for direct and indirect electrification. Rather than micro-managing and over-regulating, the EU should focus on creating a single market for innovation and supporting SMEs and cleantech start-ups, as pivotal agents of change. The electricity market should be improved and made future-proof, through reforms to lower electricity costs, provide investment incentives and optimise financing for renewable assets. The Net Zero Industry Act effectively promotes the use of energy regulatory sandboxes, but these should be swiftly designed and implemented to expedite the adoption of new technologies and streamline regulatory frameworks to foster innovation across member states.

Member states should prioritise tax incentives, grants, and public guarantees over subsidies to support clean technology. Efforts should be made to enhance the bankability of smaller companies. The EU should also transition towards sector coupling and sector integration.

On the international level, the EU should further diversify its partnerships with energy-exporting third countries to decrease its import vulnerabilities. Additional programmes under the Global Gateway Initiative should foster a greater diversification of the supply of key clean technologies (e.g. hydrogen) and raw materials essential for the green transition. The EU should also advance the Climate Club, shaping it into a sectoral model, fostering knowledge exchange and enhancing climate finance mechanisms.

	Programme 1	Programme 2	Programme 3
	Implementing a future-proof electricity market	Boosting cleantech and industrial decarbonisation	Forming polycentric energy and climate partnerships
Project 1	Shift subsidies from fossil fuels to guarantees for PPAs for SMEs to boost a market-driven renewable-energy expansion. Provide EU-wide guidelines for complementary double-sided CfDs that incentivise innovation and efficiency. Develop an EU-wide storage and flexibility strategy on the demand side. Ensure EU compatibility of capacity mechanisms, complementing H2-ready gas or nuclear power plants.	Establish innovation incentives to support startups, and signal that European CCfDs are temporary, offering predictability to companies, investors, and the public sector. CCfDs should be linked to the EU ETS and initially have a term of 10 years, focused on applications where they provide a clear added value in terms of resilience.	Couple hydrogen diplomacy with EU climate diplomacy. Support third countries in developing a voluntary certification scheme for green hydrogen and derivatives that is aligned with EU requirements. The European Commission should locate key regions that are only taking first steps in the hydrogen economy and should provide concrete support on the formulation of standards and certification.
Project 2	Improve long-term visibility on infrastructure planning and underpin it with binding political commitments that encourage financial commitment to ramping up supply chains. Grid capacity bottlenecks cannot cope with an ambitious RES expansion.	The EIB should pursue its rollout of guarantees, focusing on scaling manufacturers of clean technologies through coverage of up to 80% of the risk. Such guarantees should aim to make cleantech bankable in the long term. The European Commission should schedule related funding for the next MFF.	Boost the energy pillar of the Global Gateway with projects aimed at mobilising additional funding to import hydrogen derivatives, through guarantees and support for off-takers. Priority should be given to sectors with the highest carbon emissions abatement potential.
Project 3	ACER, ENTSO-G and ENTSO-E should further detail hydrogen infrastructure planning. The first step should be to develop an integrated offshore and onshore hydrogen infrastructure plan for the North Sea as a blueprint to be replicated in other key areas in the EU.	Simplify, standardise and speed up the application process for permits and licences. To this end, energy regulatory sandboxes should be swiftly further detailed on a sector-by-sector basis, with the eventual aim of enabling regulators to assess the effectiveness of different regulatory approaches and their impacts on the EU's energy system.	Strengthen the EU's role in the climate club established by the G7, particularly in cooperation on sectoral strategies for industrial decarbonisation. The Climate Club offers a framework for establishing partnerships outside bilateral and multilateral relationships in hard-to-abate industrial sectors. It could play a crucial role in enhancing the international dimension of the EU's climate resilience.

Securing Europe's Independence in Obtaining Critical Raw Materials and Tech Components

Frank Umbach

The geo-economic and geopolitical importance of securing a future supply of critical raw materials (CRMs) has been severely neglected by governments and industries over the past decade. But experts have been sounding the alarm on this matter for years. CRMs are essential not only for renewable energies, electric batteries and digitalisation technologies but also for the defence and space industries. Until a few years ago, the discussion about the security of raw material supply remained largely isolated from the issue of energy security. But in the future, energy security will be closely linked to the security of raw material supply and to new import dependencies that have geopolitical implications.

In addition, Europe's lack of semiconductors and world-class companies also carries the risk that both the continent's overall economic future and the artificial intelligence revolution will make its critical supply chains heavily dependent on the US and China—on their companies, policies and technologies. This flies in the face of the EU's own goals: strategic autonomy, enhanced geopolitical resilience and becoming a worldwide geopolitical actor that can secure its own strategic interests across the globe.

With the Critical Raw Materials Act proposed by the European Commission in March 2023, the EU attempts to respond appropriately to the numerous challenges related to the security of raw material supply, to electric mobility and to battery industries. The EU increasingly needs a stable, sustainable and sufficient supply of CRMs for its economy, the expansion of renewable energies, decarbonisation, digitalisation technologies and defence industry. This need will continue to grow significantly in the future.

In its wider economic security strategy, the EU has paid much more attention to these geo-economic and geopolitical dependencies, supply chain stability, the diversification of imports, derisking strategies such as onshoring and friendshoring and other instruments aimed at decreasing the potential for both future blackmailing and the economic coercion of the EU. These de-risking strategies also highlight a paradigm shift in long-prevailing assumptions in Europe's industrial and foreign policies, such as the idea that the security of supply and entire critical supply chains should be entrusted to free markets and the industrial sector itself.

	Programme 1	Programme 2	Programme 3
	Enhancing the security of the supply of CRMs	Implementing a foreign policy on CRMs	Promoting a ‘de-risking’ supply chain concept for CRMs and components needed for disruptive technologies
Project 1	Expand European projects involving mining, refining and processing capacities.	Expand CRMs-related partnership agreements and shared projects with like-minded democratic countries with market economies (such as Norway, Canada and Australia).	Develop a strategy for balancing supply security with incentives for free trade and fair competition rules, whether bilateral or global in their application. These rules should not contain provisions for decoupling or protectionism.
Project 2	Promote the stockpiling of raw materials.	Promote and provide financial support to onshoring and friendshoring projects involving the mining, refining and processing of CRMs.	Prioritise and provide financial support for friendshoring projects aimed at developing and producing disruptive technologies and components for critical technologies
Project 3	Transfer more authority for security of the supply of CRMs from the member states to the European Commission, in line with what was done with the EU’s gas policies.	Develop new global regulatory frameworks for CRM mining by adjusting new environmental, climate and technology standards.	Increase the exchange of information and best practices related to disruptive technologies and critical technology components among the G7 and other strategic partner countries.

Ensuring Global European Leadership in a Collective Decarbonisation Effort

Jarosław Pietras

As a global leader in climate policy, the EU must confront international trade competition from economies that are taking less ambitious climate actions. As the EU implements more stringent climate policies, this could seriously impact the competitiveness of European industries in the long run. Notably, the success of European decarbonisation has resulted in the diminishing importance of the EU's CO₂ emissions, as they represent a smaller fraction of the world's total emissions. If global climate goals are to be achieved, other countries should be incentivised to take significant steps to mitigate climate change. Therefore, Europe needs to actively encourage its trading partners in both well-developed and developing countries to reduce their greenhouse gas emissions to a similar extent.

Europe's significant normative power should be fully utilised for this purpose. This 'soft' power could prove to be one of the most effective means of encouraging others to move forward in the fight against climate change. The European External Action Service (EEAS) and the EU representations worldwide have a major role to play. To be fully effective, Europe's normative power should be employed together with traditional foreign-policy actions, legal measures and development aid targeted at encouraging the EU's trading partners to mitigate climate change.

The Union's foreign policy should aim at expanding dialogue on climate with major partners, not only explaining internal EU climate instruments but also proposing common actions. The EU is already leading by example in greening international trade by promoting sustainable practices within its own borders. It also has the Carbon Border Adjustment Mechanism (CBAM) to prevent carbon leakage—the first and only mechanism of its kind. The EU should incentivise the adoption of green trade practices through agreements and partnerships with other countries. However, it should start with a reform of the World Trade Organization (WTO) aimed at incorporating a green agenda in trading rules. Efforts should be made to reach agreement by the next ministerial conference of the WTO.

Steps should be taken to facilitate trade in green products. These measures should focus on eliminating tariffs and other trade barriers. In particular, evaluating global value chains on the basis how well they promote sustainability can help to identify places where more effort is needed. This would help to create a global green marketplace, which could be based on common environmental standards. The creation of such a green marketplace should be a guiding principle both for the WTO and in Europe's trade agreements. It should be a component of the EU Global Gateway, of EU-US trade arrangements and bilateral agreements with all EU partners. To accomplish this, climate diplomacy must be intensified. This could include offering preferential trade terms to countries that meet certain environmental criteria or providing financial assistance for green initiatives.

	Programme 1	Programme 2	Programme 3
	Greening the EU's international trade	Ensuring international cooperation on climate and intensifying climate diplomacy	Mobilising private finance for sustainable development aid
Project 1	Engage in WTO negotiations to facilitate trade in green goods and services. Support a reform of WTO rules that would make them indisputably consistent with climate objectives.	Fully apply Europe's normative power to promote international climate actions by coordinating between EU representations and the embassies of EU member states. Create synergy between hard and soft external policy instruments in use by the EU Commission and the EEAS.	Ensure that European companies which invest abroad do this in a sustainable and environmentally responsible manner. The EU can accomplish this objective by implementing the CSDD.
Project 2	Urgently initiate measures to promote European exports of products covered by CBAM. Review, analyse and prevent any circumvention of CBAM rules. Make use of the 'CBAM international effect' on trading partners by enhancing relations with the countries introducing carbon pricing.	Facilitate the development of a G7 Climate Club that has an agenda to cooperate on climate actions.	Finance a fair international just transition with resources from European development assistance. Blend official EU development aid with private financial sources to ensure additional financing.
Project 3	Expand the networks of the EU free trade agreements with like-minded countries.	Find common ground with the US, China, India and other countries in the fight against climate change. This could be done by initiating comparisons of decarbonisation outcomes.	Green European development aid by focusing on the EFSD. Make sure that the Global Gateway includes major climate components supported by EU funds.

Financing the Sustainability Agenda

Markus Demary and Adriana Neligan

The EU has set legally binding targets for climate-neutrality by 2050. To succeed in the transition to a low-carbon economy, companies need to continuously develop new and improved climate-friendly technologies, and to adopt or move towards low-carbon business models. This will require investments in digital technologies, automation and AI, as well as stable supply chains, all of which will need to be consistent with the EU taxonomy for sustainable activities. To succeed in decarbonising the economy, it is estimated that the EU will have to invest between €758 and €1055 billion per year until 2050 in the industry, energy, transportation and building sectors. Financing the necessary innovations and investment volumes is challenging due to tighter banking regulations, increased bureaucracy for loan applications and portfolio reallocations away from certain industries, as well as government and corporate debt levels that might become unsustainable.

How these immense volumes of investment are financed is particularly relevant to the successful mastering of these structural changes. But while the EU has developed a green bond framework for the financing of decarbonisation, a large part of the corporate sector has no access to this financial instrument. SMEs lack access to bond market investors since the issuing limits are too large for these businesses and bond investors are not interested in trading in small lot sizes. SMEs therefore depend on bank financing. However, bank financing will become more restrictive, as banks have to raise their equity capital to meet the requirements of the newest bank regulation package, known as Basel 4. McKinsey & Company estimates that banks will require €120 billion in additional capital to be ready for the implementation of the new bank regulations, while the German Economic Institute estimates that EU banks will need to expand their capital base by a further €276 to €384 billion until 2030 to finance decarbonisation. Thus, freeing up bank equity capital for new SME loans is important, as is capital market investors embracing SME finance.

The administrative burdens for SMEs when applying for finance have increased due to sustainability reporting, which may discourage enterprises from applying for loans. Moreover, banks and investment companies have already started to decarbonise their loan and asset portfolios, that is, they are reallocating their portfolios away from carbon-intensive sectors. This could lead to financing problems for carbon-intensive SMEs that would like to invest in climate-friendly technologies. For successful structural change that promotes the decarbonisation of companies and prevents SMEs from leaving the market, the ability to match SMEs with appropriate funding banks has to be preserved during the transition. The right framework conditions are therefore needed for the financial sector and the real economy so that investments and innovations can be financed. Keeping corporate and government debt at a sustainable level is important during the decarbonisation process, since a large volume of the needed investments will have to be financed by debt instruments.

	Programme 1	Programme 2	Programme 3
	Strengthening and auditing EU funds	Strengthening incentives for the transformation	Supporting European SMEs
Project 1	<p>Improve the match between companies, banks and investors by auditing and by rethinking how EU funds can be allocated to support innovations and investments in decarbonisation (e.g. guarantees for SME loans, investment funds). Use of own resources (CBAM) for the transition by allocating these to the EIB.</p>	<p>Reform the EU energy tax and subsidy system, aligning it with EU climate and renewable energy objectives. Ensure a level playing field within the EU by gradually phasing out fossil-fuel subsidies, by including CO² content, and by strengthening tax incentives for R&D in low-carbon technologies and the early depreciation of carbon-intensive equipment. Ensure consistency of the EU ETS with other regulations.</p>	<p>Reduce bureaucratic costs for SMEs arising from non-financial reporting requirements by standardising the ESG key performance indicators that such companies must report to banks and customers (e.g. taxonomy-eligible turnover or taxonomy-aligned turnover). Develop data-sharing standards (data ecosystem) for SMEs for the reporting of ESG data which can be accessed by banks and customers.</p>
Project 2	<p>Strengthen the EIB's ability to finance the transition. Risks for investors can be reduced with the EIB as the anchor investor for infrastructure investment funds or initial public offerings.</p>	<p>Assess the impact of the EU taxonomy on the basic materials industry as an enabling activity for other industries, and on the defence industry. Reform the EU taxonomy in case of conflicts with other policy goals, for example, defence and security.</p>	<p>Eliminate financing obstacles for innovative SMEs during their transition and during the innovation life cycle by freeing up bank equity capital by promoting platforms for the securitisation of SME loans for smaller banks. Audit and reform bank regulations that hinder the financing of SMEs in times of transition (e.g. capital requirements for unrated companies).</p>
Project 3	<p>Develop a special investment fund targeted at the financing of carbon capture companies. Overcome market failures at the various stages of the innovation cycle by using instruments such as development grants and early- and late-stage venture capital.</p>	<p>Enable the monitoring of risks from climate change and the transition by developing frameworks for supervisory agencies on how to measure climate risks and the transitional risks of companies at the macroprudential level (e.g. concentrated exposures to carbon-intensive sectors, non-performing loans due to company indebtedness during the transition).</p>	<p>Promote local investment funds for SMEs backed by EU funds. SMEs need silent participation equity capital for financing the transition to hold their debt at a sustainable level while investing in their carbon-neutral transformation. Structure these funds so that investors with a higher risk tolerance can invest in the development of new ideas and business models while risk-averse retail investors can invest in more incremental innovations from existing SMEs.</p>

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