

5 Reinventing Industrial Policy

5.1 Introduction

When French President Macron spoke in Amsterdam in April 2023, he put industrial policy at the centre of the European future,¹ affirming its belonging to the core of the European Union's (EU) imaginaries of prosperity. After years of privatisation of (political) responsibility and faltering action, it turns out that Europe needs an actual industrial policy. For at least three reasons. To start, EU policymakers have been increasingly confronted with the fact that one cannot rely entirely on manufacturing partners, and thus a greater stress on 'strategic autonomy' is needed.² Also, the growing de-industrialisation means not only losing *capacity* but also losing *knowledge* in how to make things we need: this makes the EU vulnerable to all types of geopolitical shocks.³ Finally, with the war in Ukraine and the pending energy crisis, we need to develop clean technology urgently, giving an implicit permission for governments to 'pick winners' in order to steer development in the desired direction. *'This decade will be decisive for the world to limit the rise in global temperatures and to take the necessary steps towards net-zero. The stakes are high and the challenges complex – but there is a once in a generation*

¹ Mike Corder and Sylvie Corbet, *Domestic Unrest Interrupts Macron's European Future Speech* (The Associated Press, 2023), <https://apnews.com/article/france-netherlands-macron-rutte-europe-c338d160f99a47830f6d90ce2c21600d>, last accessed 8 January 2024.

² European Commission, *Europe's Moment: Repair and Prepare for the Next Generation*, COM(2020) 456 final, p. 13; European Commission, *A New Industrial Strategy for Europe*, COM(2020) 102 final, p. 13.

³ Regulation (EU) 2023/1781 of the European Parliament and of the Council of 13 September 2023 establishing a framework of measures for strengthening Europe's semiconductor ecosystem and amending Regulation (EU) 2021/694 (Chips Act), Recital 21.

opportunity to use this imperative to act as a catalyst to invest in the clean energy economy and industry of the net-zero age'.⁴

Industry, or public support for it, is not a novel matter. Public support for industry has been provided in many different ways over the past centuries. In Europe, when industrial manufacturing proliferated in the nineteenth century, the “public support” for the new manufacturing was twofold: on the one hand, states have (if in different ways) ensured migration of people from villages to towns and cities, in order to provide a workforce.⁵ On the other hand, the lack of any real environmental standards or labour protections provided a sort of public subsidy to manufacturing.⁶ The economic growth, as the economic inequality, that ensued in countries such as the UK, Belgium, and later also in Germany and France, was considerable.⁷

This ‘laissez-faire industrial policy’ has been replaced in Europe after WW2, with a set of active measures that were intended to support particular sectors, industries, and technologies. This ‘vertical industrial policy’ involved everything from state-owned enterprises, especially in the case of natural monopolies, to public procurement and subsidies to particular industries, such as steel or cement. In the 1950s and 1960s, public support in European Communities went mainly to heavy industry, while in the 1970s, it expanded to electronics, aircraft, and biotechnology.⁸

From the 1980s onwards, with the rise of neoliberal thought, the recipes of this welfare state industrial policy were said not to work any longer.⁹ The EU member states (MSs) thus increasingly moved to the so-called horizontal measures,¹⁰ such as generalised tax incentives for Research & Development or the purchase of machinery and/or specific products (cars),¹¹ as a means to foster a “good investment climate” rather than any specific sectors. The EU itself pushed for the liberalisation of public

⁴ European Commission, A Green Deal Industrial Plan for the Net-Zero Age, COM(2023) 62 final, p. 1.

⁵ Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Beacon Press, 1944).

⁶ Ibid.

⁷ Carl Benedikt Frey, *The Technology Trap: Capital, Labor, and Power in the Age of Automation* (Princeton University Press, 2019).

⁸ Mario Pianta, ‘An Industrial Policy for Europe’, *Seoul Journal of Economics* 27, no. 23 (2014): 277–305, p. 278.

⁹ Ibid., p. 280.

¹⁰ Laissez-faire ‘all goes’ approach can be arguably also seen as a ‘horizontal’ industrial policy.

¹¹ Pianta, ‘An Industrial Policy for Europe’.

services on the one hand and constrained state aid on the other, making alternative pathways for its MSs less readily available.¹²

Shortly after the onset of the 2008 crisis, the EU launched its first present-day attempts to develop EU industrial policy. Yet, as we will see in later sections, at the start these efforts were still strongly conditioned by neoliberal conceptions of development and prosperity. This will change partially with the European Green Deal (EGD), which has entertained large aspirations on both economic and environmental fronts. The realisation of these objectives remains, however, constrained by the EU's own limited competences and limited resources, while giving the unconstrained green light to MSs' own industrial policy investment threatens to put the internal market and regional development in danger, as there is a vast difference among the MSs as to how much state aid they can provide.¹³

What is more, in the most recent instalments of the series 'NET ZERO' industrial policy, the EU has relapsed back into a "publicly-financed market approach".¹⁴ Driven by concerns of lagging behind the competitors (US and China), in its newly found narrative of competitiveness, the EU seems to ready itself to condone large subsidies and tax breaks to clean tech industry production, even at the expense of internal market concerns¹⁵ and without any conditionality worth its name concerning companies' social and environmental standards, or increased public voice and sharing in the benefits (rather than only costs) of technological advance.

The whole question of industrial policy is also a contested one: what kind of 'green technology' and 'clean economy' Europeans want and can realistically get? There has been little democratic discussion about this question: do we really need all those electric SUVs, given their environmental impact and the level of extraction needed to produce them? Can "money" (e.g. taxing CO₂ emissions) mediate all distributive choices – or is more needed? Is the financing of carbon storage, the core climate fantasy of big oil, indeed the best way to invest public money? Shall we perhaps invest instead in technologies that can deliver excellent and affordable public transport? Not only are these conversations not being

¹² Ibid. ¹³ Repair and Prepare for the Next Generation 2020, p. 3.

¹⁴ Gabor calls this 'de-risking'; see Gabor, 'The (European) Derisking State'.

¹⁵ John Springford and Sander Tordoior, *Europe Can Withstand American and Chinese Subsidies for Green Tech* (European Centre for Policy Research, 2023).

had in Brussels or nationally, but also the new set of EU austerity measures may directly undermine the possibility of public solutions even being realistically contemplated.¹⁶

In this chapter then, I aim to explore the changing imaginaries of prosperity in the EU's industrial law and policy. I focus on the present-day industrial policies of the European Commission starting with the 2010 Industrial Policy¹⁷ and including a more recent avalanche of legislative proposals and measures (Chips Act,¹⁸ Batteries Act,¹⁹ Critical Minerals Act,²⁰ and Net Zero Industry Act²¹), the changes in the General Exception,²² and the Temporary Crisis and Transition Framework.²³ I will mainly be interested in how the EU has been repositioning itself in response to changing economic and political circumstances, on the background of the changing geopolitical situation and shifting scientific knowledge. Importantly, rather than focusing on particular technologies or sectors, I will discuss the leading themes in industrial policy such as industrial strategy, competitiveness, financing, or taxation, as they express the changing imaginaries of economy, law, politics, government, and ultimately also of our relation to nature.

¹⁶ Público, 'Brussels asks Spain for a Tax Adjustment and Urges It to Withdraw Energy Aid' (2023), www.publico.es/economia/bruselas-pide-espana-ajuste-fiscal-y-le-instata-retirar-ayudas-energeticas.html#md=modulo-portada-bloque:4col-t5;mm=mobile-verybig, last accessed 8 January 2024.

¹⁷ European Commission, an Integrated Industrial Policy for the Globalisation Era Putting Competitiveness and Sustainability at Centre Stage, COM(2010) 614 final.

¹⁸ Chips Act 2023.

¹⁹ Regulation (EU) 2023/1542 of the European Parliament and of the Council of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC.

²⁰ European Commission, Proposal for a Regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724, and (EU) 2019/102, COM(2023) 160.

²¹ European Commission, Proposal for a Regulation of the European Parliament and of the Council on establishing a framework of measures for strengthening Europe's net-zero technology product manufacturing ecosystem (Net Zero Industry Act), COM(2023) 161.

²² Regulation (EU) 2023/1315 of 23 June 2023 amending Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty and Regulation (EU) 2022/2473 declaring certain categories of aid to undertakings active in the production, processing and marketing of fishery and aquaculture products compatible with the internal market in application of Articles 107 and 108 of the Treaty, C/2023/4278.

²³ European Commission, Amendment to the Temporary Crisis and Transition Framework for State Aid measures to support the economy following the aggression against Ukraine by Russia, COM(2023) 1188.

5.2 Greening Growth

5.2.1 EU Industrial Strategy

We start our story in 2010, when the European Commission, after a longer pause, again produced a communication on ‘industrial policy’. In this period, the EU is plagued not only by the ongoing economic crisis, asymmetric recovery, low growth, low demand, and low productivity but also by widespread deindustrialisation due to the outsourcing of manufacturing to third countries.²⁴ The disregard for industrial policy was both the outcome of the neoliberal concern with the ‘government failure if it becomes too involved in industrial policy by “picking winners”’²⁵ and the assumption that as an advanced economy, the EU is far more about providing (financial and technological) services than manufacturing goods.²⁶ In the 2010 communication, thus the Commission reasserted the importance of manufacturing for the health of the economy in general: ‘An ambitious strategy framework for a new industrial competitiveness policy must put the competitiveness and sustainability of European industry at centre stage’.²⁷

While the 2010 industrial policy reasserts the importance of manufacturing and industrial production, it resembles the welfare state vertical industrial policy only by its name.²⁸ The 2010 policy remains firmly committed to horizontal policies, stressing the centrality of general infrastructural conditions, or “business environment”, for industrial development, including liberalisation of public services, as it is the ‘Competition, the efficiency of public and private services, and infrastructure [that] are important determinants of industrial competitiveness in Member States. In many Member States, increasing competition in the network industries remains a challenge’.²⁹ What it seems to want to add to what is already in place is, first, its concern with greater alignment between various policies (e.g. competition and trade) relevant for industrial development and, second, the preoccupation with innovation, that is turning

²⁴ Pianta, ‘An Industrial Policy for Europe’, p. 280.

²⁵ Mariana Mazzucato, Rainer Kattel, and Josh Ryan-Collins, ‘Challenge-Driven Innovation Policy: Towards a New Policy Toolkit’, *Journal of Industry, Competition and Trade* 20, no. 2 (2020): 421–37, p. 424.

²⁶ New Industrial Strategy for Europe 2020, p. 3.

²⁷ European Commission, An Integrated Industrial Policy for the Globalisation Era Putting Competitiveness and Sustainability at Centre Stage. COM(2010) 614 final, p. 4.

²⁸ Pianta, ‘An Industrial Policy for Europe’, p. 288. ²⁹ Industrial Policy 2010, p. 10.

(academic) knowledge into marketable products as ‘*Europe is not good enough at turning its excellence in ideas into marketable goods and services*’.³⁰

The following 2014 Industrial Renaissance policy³¹ makes a very careful shift towards steering in the direction of technological and industrial development, mostly via the ‘regional turn’. Thus the idea behind the ‘Smart specialisations’ programme has been that the regions themselves would bring together industry, knowledge institutions, public institutions, investors, and more to develop particular regional industrial ‘specialisations’, co-financed by the European Structural and Investment Funds.³² These specialisations should have in principle contributed to six rather broad strategic areas (advanced manufacturing, key enabling technologies, clean vehicles and transport, bio-based products, construction and raw materials, and smart grids) identified already in the 2012 industrial policy.³³

While Smart Specialisation were intended to further both industrialisation and regional economic convergence, Wigger argues that they have enjoyed a limited success.³⁴ Not only did they not lead to a new wave of industrialisation, but they have also possibly only increased divergence between the regions. While the advanced regions were developing plans for advanced technologies and getting large co-financing from the EU, the regions lagging behind, with worse infrastructure, less knowledge institutions, and less capital, could only stick with their traditional (non-advanced) production sectors, usually focused on food or tourism.³⁵

Even if the importance of green and circular approaches has already been declared in the 2010 policy, and remarkably *less* stressed in the 2014 policy,³⁶ it is only with the Green European Deal that *green* as well as *social* – that is the transition must be inclusive and just – became a

³⁰ Industrial Policy 2010, p. 12.

³¹ European Commission, for a European Industrial Renaissance, COM(2014) 14 final.

³² Pianta, ‘An Industrial Policy for Europe’, p. 289.

³³ European Commission, a Stronger European Industry for Growth and Economic Recovery, Industrial Policy Communication Update, COM(2012) 582 final.

³⁴ Angela Wigger, ‘The New EU Industrial Policy and Deepening Structural Asymmetries: Smart Specialisation Not So Smart’, *JCMS: Journal of Common Market Studies* 61, no. 1 (2023): 20–37.

³⁵ *Ibid.*, p. 28.

³⁶ The reasons are discussed below, as the 2014 policy seems to have been possibly quite narrowly following the ERT (Business association), ERT, ‘EU industrial renaissance, ERT agenda for action 2014–2019’ (2014).

somewhat more central orientation for industrial policy.³⁷ The 2020 industrial policy starts by saying that the EU ‘cannot afford to simply adapt – it must now become the accelerator and enabler of change and innovation. Our industrial policy must help make this ambition a reality’.³⁸ It thus embraces quite outspokenly the circular economy model, on economic, environmental, and importantly moral grounds: ‘To do this, we must move away from the age-old model of taking from the ground to make products, which we then use and throw away. We need to revolutionise the way we design, make, use and get rid of things by incentivising our industry. This more circular approach will ensure a cleaner and more competitive industry by reducing environmental impacts, alleviating competition for scarce resources and reducing production costs. **The business case is as strong as the environmental and moral imperative.** Applying circular economy principles in all sectors and industries has potential to create 700,000 new jobs across the EU by 2030, many of which in SMEs’.³⁹

The Next Generation EU (NGEU), while not strictly an industrial policy but a recovery plan to deal with the Covid crisis, however, adds (some) money where the EU’s mouth is. The recovery funds (with the anticipated height of some 750 billion from the EU in loans and grants) should be directed towards the ‘twin transition – digital and green’, on the basis of projects developed by MSs. At the same time, unlike the previous 2008 crisis, the NGEU tries to make solidarity – between states, regions, groups, and citizens – the guiding principle: ‘In our Union, a euro invested in one country is a euro invested for all. A collective and cohesive recovery that accelerates the twin green and digital transitions will only strengthen Europe’s competitiveness, resilience and position as a global player. This is why solidarity, cohesion and convergence must drive Europe’s recovery. No person, no region, no Member State should be left behind’.⁴⁰ In 2021, the Commission published an update on the 2020 industrial policy to account for the additional priorities due to the Covid crisis.⁴¹

Perhaps the ‘busiest’ year in the field of industrial policy was 2023: the year of writing this chapter. Several important documents were put forth. First, the Commission publishes in March 2023 the Net Zero Plan,⁴² provoked by the concerns about the US Inflation Reduction Act

³⁷ European Commission, The European Green Deal, COM(2019) 640 final.

³⁸ Industrial Strategy 2020, p. 1.

³⁹ Industrial Strategy 2020, p. 9. All emphases in the quotes, in this and the following chapter, were added by the author of this book.

⁴⁰ Repair and Prepare for the Next Generation 2020, p. 1.

⁴¹ European Commission, Updating the 2020 New Industrial Strategy: Building a Stronger Single Market for Europe’s Recovery, COM(2021) 350 final.

⁴² Net Zero Plan 2023.

and characterised by a somewhat more bellicose stance due to the growing concern about China and the ongoing Russian aggression in Ukraine. The Plan has been accompanied by the Proposal for a Net Zero Industrial Act⁴³ and the Proposal for Critical Raw Materials Act (preceded by the Critical Raw Material Strategy⁴⁴). Later in the same year, two other legislative measures are approved: in September 2023, the Chips Act,⁴⁵ and in July 2023, the Battery Regulation⁴⁶ (which is also an Ecodesign instrument).

In what follows, I will set out the most important elements of the ‘Green Deal Industrial Plan for Net Zero Age’ (hereafter ‘Net Zero Plan’), with references to legislative measures on its basis, in order to decipher the last turn in the EU’s thinking about industrial policy. The first prong of Net Zero Plan concerns the ‘predictable and simplified regulatory framework’. The implementation is to take place via key aspects of the Net Zero Industry Act, which provides a framework to foster clean technologies such as batteries, windmills, pumps, and solar panels. The Net Zero Industry Act divides technologies in line with their “readiness” to contribute to net zero targets in 2030 and beyond⁴⁷ and aims to give those more ready the greatest amount of advantages in the permission process.⁴⁸ The Act introduces a ‘one-stop-shop’ for the facilitation of the permissions processes,⁴⁹ ‘regulatory sandboxes’ for more disruptive innovation and testing of clean tech,⁵⁰ and it aims to foster public and private demand, by designating criteria for public procurement, concessions, incentives, etc.⁵¹

To be able to produce clean technology, the Net Zero Plan relies on the Critical Minerals Action Plan,⁵² implemented finally via the Proposal for the Critical Raw Materials Act.⁵³ The most important element of the Act

⁴³ Net Zero Industry Act Proposal 2023.

⁴⁴ European Commission, Proposal for a Regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724, and (EU) 2019/102, COM(2023) 160.

⁴⁵ Chips Act 2023. ⁴⁶ Battery Regulation 2023.

⁴⁷ Net Zero Industry Act Proposal 2023, p. 15.

⁴⁸ Net Zero Industry Act Proposal 2023, p. 23.

⁴⁹ Net Zero Industry Act Proposal 2023, art. 4.

⁵⁰ Net Zero Industry Act Proposal 2023, art. 26.

⁵¹ Net Zero Industry Act Proposal 2023, p. 6.

⁵² European Commission, Critical Raw Materials Resilience: Charting a Path towards Greater Security and Sustainability, COM(2020) 474.

⁵³ Critical Raw Materials Act Proposal 2023.

includes the support for ‘strategic projects’, in both extraction and recycling, that can take place both within and outside the EU.⁵⁴ The Act also provides for ‘one-stop-shops’ to speed up and simplify administrative procedures for such projects, creates a framework for ‘strategic partnerships’ with third countries and facilitates ‘joint purchasing’ of raw materials.⁵⁵ The partnerships should go first and foremost to countries that ensure better respect for social, human rights, and environmental standards, and enable a meaningful engagement with local communities.⁵⁶

A second prong of the Net Zero Plan concerns access to finance. As the new wave of industrial policy is a response to the US’s Inflation Reduction Act, the EU wants to level the playing field for European firms. The most important financing instruments mentioned in the Plan are the NGEU, which have already made 250 billion available for clean tech. Further, Horizon Europe dedicates 40 billion to clean technologies and cohesion policies have made available another 100 billion, including the Just Transition Fund. Importantly, the Commission laments that to date most of *‘these EU funding sources have largely benefitted research and innovation and deployment of renewable energy and related infrastructures, rather than targeting manufacturing capacity in the sector’*.⁵⁷ The EU funding should, instead, increasingly find its way to manufacturing – an aspect that many less developed regions in Europe will likely welcome, should they ever become the space where clean tech is produced.

When it comes to MSs funding, the EU extends and expands the use of state aid in order to allow MSs to grant aid towards Net Zero projects, within the framework of the Temporary Crisis and Transition Framework⁵⁸ and the revision of the General State Aid exception.⁵⁹ The aid may be set out as a percentage of overall investment costs for clean tech (hydrogen, energy efficiency, or electrification projects) and ‘enhanced support schemes’ for strategic net zero technologies (including controversial technologies such as carbon capture and storage and electric vehicles) that should match the aid received by competitors abroad or the aid offered by a third country. The aid can also be provided as tax benefits.

⁵⁴ Critical Raw Materials Act Proposal 2023, chapter 3, s. 1.

⁵⁵ Critical Raw Materials Act Proposal 2023, chapter 6, art. 33. The first one was concluded with Morocco.

⁵⁶ Critical Raw Materials Act Proposal 2023, chapter 5. ⁵⁷ Net Zero Plan 2023, p. 8.

⁵⁸ Temporary Crisis and Transition Framework 2023, section 2.8.

⁵⁹ General Block Exemption Regulation Amendment 2023, Article 36(b).

Both instruments try to thread a difficult path of both mustering public financing for clean tech projects on the one hand and the danger that increased aid, which only some MSs are able to give, will lead to further divergence between the MSs. This also means that funding cannot come only from the MSs – not least because that would potentially cause a rise of disparities across the internal market. In order to limit this threat, the EU intends to expand the REPowerEU funding and issue guidance on how to best use the Recovery and Resilience plan in the context of the NGEU to further clean tech. This should also include funding to create one-stop-shops for permits, tax breaks, and skills training. The EU hopes to support investment through several additional schemes and institutions, including InvestEU, the European Investment Bank, the EBRD, and the Innovation Fund as well as ‘Important Projects of Common European Interest’ (IPCEI) with many billions.⁶⁰ Perhaps most importantly, in the midterm, the EU proposes a ‘European Sovereignty Fund’ that should increase its financing capacity, based on EU borrowing and own funds via taxation. While the European Parliament, in reaction to the Net Zero Plan, has called on the Commission to be more ambitious in expanding its taxation capacity (including financial transactions tax and VAT changes as well as the income from ETS and carbon border mechanism),⁶¹ there seems to not be enough support from the side of MSs for this new financing instrument. Thus, for the 2024 budget, the Commission has proposed the ‘precursor’ to the Sovereignty Fund, the ‘Strategic Technologies for Europe Platform’, that should better coordinate the existing funding, and with an additional 10 billion euro, Von der Leyen hopes to reach some 160 billion euro in private investment in the upcoming years.⁶²

The third prong of the Plan relates to enhancing skills. The Net Zero Industry Act proposes ‘Net Zero Academies’⁶³ that would make sure that enough of a workforce will be educated with necessary skills.

⁶⁰ Importantly, two out of five projects today are the controversial hydrogen projects, which are more often than not seen as wasteful projects driven by big oil and aiming to skim more public funding – to boost their already vast fossil energy profits in the wake of war in Ukraine.

⁶¹ European Parliament, Report on own resources: a new start for EU finances, a new start for Europe (2022/2172(INI)).

⁶² European Commission, ‘EU budget: Commission Proposes Strategic Technologies for Europe Platform (STEP) to Support European leadership on Critical Technologies’, https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3364, last accessed 9 January 2024.

⁶³ Net Zero Industry Act Proposal 2023, Art. 23.

While the Commission is hereby committed to provide incentives for creating such academies, it is unclear who is going to carry the brunt of the work and pay the costs. Industries themselves, including the industries that enjoy public support, are not mentioned in this section in one way or another; it seems that this is likely to be left to public educational institutions. This is quite unlike the US Inflation Reduction Act, which relies on financial incentives and conditionalities for the recipients of public funding in order to provide apprenticeships in the industry.⁶⁴

The fourth element of the Net Zero Plan concerns resilient supply chains. While the Plan remains vague, two important Regulations have been proposed in 2023. The Chips Act takes a more institutional approach to fostering this important sector, which has proven very sensitive to supply chain risks. The Act provides for the creation of specific testing and manufacturing facilities (integrated manufacturing facilities and founding facilities) as well as forms of institutional cooperation (Chips Joint Undertaking, and national Competence Centres). The Act also creates a specific legal form – the European Chips Infrastructure Consortium – that should have easier access to public funding. All types of cooperation need to bring together at least three MSs or their actors to engage in manufacturing and project coordination to receive all kinds of benefits as a special public interest entities. Further, the Act also puts forth Common Purchasing framework for periods of crisis and introduces some degree of conditionality for industries that have received public funds, namely to produce and supply certain output as a matter of priority, trumping both their private and public law obligations.⁶⁵ The other important instrument is the Batteries Regulation, which introduces a whole set of due diligence obligations with regard to battery supply chains, including some relating to diversification and resilience.⁶⁶

More generally, when it comes to “making trade work for clean transition”,⁶⁷ the EU continues to rely on trade openness, supporting the WTO, and concluding more FTAs. In the Net Zero Plan, the Commission does not engage with the structure of those trade agreements, which have thus far fallen short of sustainability objectives,

⁶⁴ Inflation Reduction Act of 2022, Pub. L. No. 117–169, 136 Stat. 1818.

⁶⁵ Chips Act 2023, art. 26. ⁶⁶ Battery Regulation 2023, art. 48.

⁶⁷ Net Zero Plan 2023, p. 17.

relegating sustainability to special chapters – and leaving the rest for business as usual.

The EU also singles out in this document its special relation to Africa, ‘*The EU has developed Sustainable Investment Facilitation Agreements (SIFA) in particular with partners in Africa, in order to make it easier to attract and expand investments while integrating environment and labour right commitments. Climate and energy is a key area for partnerships under Global Gateway, the EU’s contribution to narrowing the global investment gap worldwide. Moreover, the EU will support developing countries in their efforts to adapt and comply with the EU’s autonomous sustainability requirements*’.⁶⁸ As I discuss in the last section, how far these objectives are truly oriented towards benefiting Africa remains questionable. The EU still seems to prioritise its own commercial interests, as the Action Plan on Critical Raw Materials makes clear, that is to ‘*ensure undistorted trade and investment in raw materials in a manner that supports the EU’s commercial interests*’.⁶⁹

5.2.2 Making Europe ‘Competitive’ via Green Growth

Competitiveness is perhaps one of the most notable elements in the economic imaginary of neoliberal capitalism.⁷⁰ One is not to be surprised thus that this is also one of the most frequently used words in the EU industrial policy. So, what makes an industry (or even more complex, a country) competitive? There are many grounds on which one can compete, especially in the context of industrial policy: on advanced technologies, high skills base, good infrastructure, and good institutions as well as cheap energy and raw materials, cheap labour, cheap credit, fertile land, etc. Or, most likely, some combination of the above.

The extractive and distributive stakes between various pathways to “competitiveness” clearly differ. Competing via technologies seems to be the most desirable mode of advancing one’s competitiveness, having benefited the Western economies over the past centuries. Technologies can be however labour *enabling*, making it easier for workers to do their jobs, or labour *replacing*, thus not only privileging capital but also, as Dani Rodrik argues, making economic growth a must – if people are not to get poorer.⁷¹

⁶⁸ Net Zero Plan 2023, p. 18. ⁶⁹ Critical Raw Materials Plan 2020, p. 15.

⁷⁰ Paul Krugman, ‘Competitiveness: A Dangerous Obsession’, *Foreign Affairs* 73, no. 2 (1994): 28–44.

⁷¹ Karl Aiginger and Dani Rodrik, ‘Rebirth of Industrial Policy and an Agenda for the Twenty-First Century’, *Journal of Industry, Competition and Trade* 20 (2020):189–207, p. 201.

In contrast, when it comes to the “developing countries” over the past decades, cheap labour and low labour and environmental standards was the main road to competitiveness. More generally, Global South countries are the source of what Moore calls cheap natures – be it labour or other “natural resources” – which have often been extracted from these countries and peoples, with most benefit accruing to multinational corporations and local elites and most of the cost left for the local populations.⁷² Today, many also fear a new ‘green extractivism’, especially in the North African context, as new sustainable sources of energy threaten to ‘eat up’ much of indigenous land, water, and other resources, in order to deliver on European energy needs.⁷³

In the EU, post-2008 crisis, deregulation and the flexibilisation of labour remained one of the favourite receipts to improve competitiveness, as internal deregulation often seemed the only possible solution in the monetary union without fiscal solidarity.⁷⁴ The EU’s industrial policy, in both 2010 and later in 2014, amplified that trend. Namely, these policies still focus on neoliberal favourite ‘horizontal measures’, that is in principle improving overall economic, social, and infrastructural preconditions for economic *competitiveness*. These however, Wigger argues, had the objective of the improvement of labour productivity in a very specific sense of ‘*unit labour costs, a ratio between productivity and total labour compensation indicating whether labour costs rise in line with productivity gains*’.⁷⁵

The 2010 Communication on industrial policy suggests that ‘*It is essential to increase productivity in manufacturing industry and associated services to underpin the recovery of growth and jobs, restore health and sustainability to the EU economy and help sustain our social model*’.⁷⁶ To do so, the Commission advises governments to modernise and increase the flexibility of workforces, as ‘*workers need support to manage these processes*

⁷² Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (Verso Books, 2015).

⁷³ Natacha Bruna, ‘A Climate-Smart World and the Rise of Green Extractivism’, *The Journal of Peasant Studies* 49, no. 4 (7 June 2022): 839–64.

⁷⁴ M. Keune and M. Jepsen, *Not Balanced and Hardly New: The European Commission’s Quest for Flexicurity* (ETUI-REHS, 2007).

⁷⁵ Angela Wigger, ‘The New EU Industrial Policy: Authoritarian Neoliberal Structural Adjustment and the Case for Alternatives’, *Globalizations* 16, no. 3 (2019): 353–69, p. 356; see also European Commission, *Industrial Policy: Reinforcing competitiveness*, COM (2011) 642 final: compared with its major competitors, the EU relative unit labour costs improved by 12 per cent since 2008, mainly due to the exchange rate effect.

⁷⁶ Industrial Policy 2010, p. 3.

successfully through flexicurity in lifelong learning' and 'support reallocation of labour, within the framework of a flexicurity system'.⁷⁷

By 2014, the Commission lamented that competitiveness had not been improved. If anything, EU competitiveness has decreased: 'Europe has traditionally ranked well as a place for business and industrial production, but is now losing competitiveness as compared to other regions in the world'.⁷⁸ The lack of competitiveness is attributed by the Commission to two things: 'Administrative burdens and regulatory complexity are being eliminated too slowly and unevenly and some labour markets are not flexible enough'.⁷⁹ In order to ensure fewer regulatory burdens, as well as to make labour more flexible (and thus less costly), the Commission undertook monitoring the 'competitiveness performance and business environment on a regular basis, notably through the European Semester process and the Member States' Competitiveness Report under Article 173 of the TFEU'.⁸⁰

To illustrate the concern with decreasing competitiveness in the 2014 Industrial Renaissance policy, the Commission references the fact that there were fewer EU countries in the top twenty of the World Bank's Doing Business Index in 2014 than in 2008. This index, recently discontinued because of shady methodology as well as the WB selling their consultancy services to countries willing to improve their index,⁸¹ has been foremost criticised because of its inbuilt preference for labour market deregulation, based on the conviction that the 'laws created to help workers often hurt them'.⁸²

Corporate Europe Observatory (CEO) reports that the reason for this particular shape of the 2014 European 'Industrial Renaissance policy', and its concern with labour deregulation, may be related to the influence that the European Roundtable of Industrialists and BusinessEurope have exercised on the Commission's industrial imaginaries.⁸³ CEO refers, there, to the Barosso's speech at the annual conference of BusinessEurope's: 'For that, your recommendations that I will certainly read,

⁷⁷ Industrial Policy 2010, pp. 15 and 21.

⁷⁸ Industrial Renaissance Plan 2014, p. 7.

⁷⁹ Industrial Renaissance Plan 2014, p. 7.

⁸⁰ Industrial Renaissance Plan 2014, p. 7.

⁸¹ Independent Evaluation Group, *Doing Business, an Independent Evaluation: Taking the Measure of the World Bank-IFC Doing Business Indicators* (World Bank, 2008), p. 8.

⁸² This will start slowly shifting in 2016; see Simon Deakin, 'The Contribution of Labour Law to Economic Development and Growth', WP 478 (2016).

⁸³ Corporate Europe Observatory, 'The "Permanent Liaison": How ERT and BusinessEurope Set the Agenda for the EU Summit' (2014), <https://corporateeurope.org/en/lobbycracy/2014/03/permanent-liaison-how-ert-and-businesseurope-set-agenda-eu-summit>, last accessed 9 January 2024.

but that I have heard, are very much in line with our preoccupations, are certainly in the right direction. Now the real key issue is implementation. (...) What we need now (...) is to focus on delivery, on implementation, so that we can have a stronger industry for a stronger Europe'.⁸⁴

The understanding of competitiveness as concerned with labour productivity in the specific sense of labour flexibility/cheapness will remain mostly intact until the late 2010s, enforced via European Semester.⁸⁵ The winds start to change after great political shifts and turmoil, including Brexit, Trump, Modi, Bolsonaro, and the general rise of the so-called populist politics. This turmoil seems to demand some more engagement with the underlying causes of discontent. Rampaging inequality, and gradually also environmental degradation, will slowly arrive on the political agenda,⁸⁶ with even the World Bank making a turn on its advice to undo labour protections in 2016.⁸⁷ The 'return of the big state', to evoke the Economist, will become a reality from the next big economic shock – the Covid crisis.⁸⁸

The EU is also due to respond to the challenges of this period – and it responds with the EGD, a new “growth strategy” that purports to take both the environmental and social crisis seriously. The EGD, with the ambition to deliver a carbon-neutral Europe by 2050, was a promise of the current European Commission President von der Leyen for support (foremost of the Greens) in the European Parliament.⁸⁹ As an important signal of the seriousness of her commitment, von der Leyen has also appointed her losing social-democratic opponent, Frans Timmermans, as the vice president of the Commission for climate.

⁸⁴ European Commission, 'Speech by President Barroso at BusinessEurope Day: Industry Matters' (2014), p. 6, https://corporateeurope.org/sites/default/files/speech-14-64_en_barroso_busineurope_day.pdf, last accessed 9 January 2023.

⁸⁵ Paul Copeland and Mary Daly, 'The European Semester and EU Social Policy', *JCMS: Journal of Common Market Studies* 56, no. 5 (2018): 1001–18; Mark Dawson, 'New Governance and the Displacement of Social Europe: The Case of the European Semester', *European Constitutional Law Review* 14, no. 1 (2018): 191–209; . For a more positive reading, see Jonathan Zeitlin and Bart Vanhercke, 'Socializing the European Semester: EU Social and Economic Policy Co-ordination in Crisis and Beyond', *Journal of European Public Policy* 25, no. 2 (2018): 149–74.

⁸⁶ Not least within the European Green Deal 2019.

⁸⁷ Deakin, 'The Contribution of Labour Law to Economic Development and Growth'.

⁸⁸ The Economist, 'The virus means the big state is back' (2020), www.economist.com/britain/2020/03/21/the-virus-means-the-big-state-is-back, last accessed 9 January 2024.

⁸⁹ France 24, 'European Commission Hopeful Von der Leyen Faces Sceptical Parliament' (2019), www.france24.com/en/20190716-europe-european-commission-president-hopeful-ursula-von-der-leyen-struggles-win-support, last accessed 9 January 2024.

The EGD presents a first attempt to shift the EU away from the prevailing neoliberal imaginaries of economy in the EU, with “labour cheapness” at its core. The EGD aims to present a *‘new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use’*.⁹⁰

The EGD marks a shift from the obsession with competitiveness, the word mentioned only three times in the EGD – in comparison with fifty-six times in the 2014 Industrial Renaissance policy and eighty-two times in the 2010 policy. Furthermore, if the 2014 Industrial Renaissance doubled down on using the European Semester to enforce competitiveness through cutting labour costs,⁹¹ the language of the EGD aims instead *‘to refocus the European Semester process of macroeconomic coordination to integrate the United Nations’ sustainable development goals, to put sustainability and the well-being of citizens at the centre of economic policy, and the sustainable development goals at the heart of the EU’s policymaking and action’*.⁹²

When it comes to the industrial policy more specifically, the EGD envisages as its future competitive advantage *‘the development of lead markets for climate neutral and circular products, in the EU and beyond’*.⁹³ In the 2020 industrial policy, which further articulates the EGD in relation to industry, the EU supplants the language of competitiveness for that of entrepreneurship. Thus *‘Our new industrial strategy is **entrepreneurial in spirit and in action**’*,⁹⁴ And *‘In the **entrepreneurial spirit** of this strategy, EU institutions, Member States, regions, industry and all other relevant players should work together to create lead markets in clean technologies and ensure our industry is a global frontrunner’*.⁹⁵ The focus on entrepreneurship continues: *‘In the **entrepreneurial spirit** of this industrial strategy, Europe must pool its strengths to do collectively what no one can do alone’*.⁹⁶ And *‘In the co-design and **entrepreneurial spirit** of this strategy, this should be supported through Public Private Partnerships to help industry develop the technologies to meet their goals, as has successfully been done in industrial alliances’*.⁹⁷

⁹⁰ European Green Deal 2019, p. 2.

⁹¹ Wigger, ‘The New EU Industrial Policy’. Zeitlin and Vanhercke instead argue that we have seen the socialisation of implementation of the European Semester between 2011 and 2016; see Jonathan Zeitlin and Bart Vanhercke, ‘Socializing the European Semester? Economic Governance and Social Policy Coordination in Europe 2020’, Watson Institute for International Studies Research Paper No. 2014–17, 2014.

⁹² European Green Deal 2019, p. 3. ⁹³ European Green Deal 2019, p. 7.

⁹⁴ Industrial Policy 2020, p. 1. ⁹⁵ Industrial Policy 2020, p. 3.

⁹⁶ Industrial Policy 2020, p. 4. ⁹⁷ Industrial Policy 2020, p. 10.

Clearly, those who have been reading contributions to the field of industrial policy in recent years may recognise the influence of the London-based economist Mariana Mazzucato on this policy. The language of the ‘entrepreneurial state’ and the ‘public-private partnerships’ as well as the recognition of the centrality of the state in steering groundbreaking innovations are signposts of this London-based economist.⁹⁸

But competitiveness is not gone entirely. As a concept, it appears relatively limitedly in the 2020 policy, but to the extent it appears, its meaning changes. It is less concerned with cutting labour costs and presents instead a conception of economy steered towards the ‘*circular approach [that] will ensure a cleaner and more competitive industry by reducing environmental impacts, alleviating competition for scarce resources and reducing production costs*’.⁹⁹ Thus, if the costs are to be cut, those are the costs on resources and energy.

The meaning of competitiveness changes again in 2023. In the Net Zero Plan, competitiveness is back in the game – not only does it appear more frequently (it appears eighteen times in the document), but it is understood in yet another typical sense of “international competitiveness” – vis-à-vis other countries that are trying to develop clean technology.¹⁰⁰ ‘*The EU has also shown how the green transition can strengthen competitiveness. (...) Our net-zero ecosystem was worth over EUR 100 billion in 2021, doubling in value since 2020*’.¹⁰¹

What is needed according to the Net Zero Plan is to foster ‘*three key proposals for industrial competitiveness, rooted in the need for reform*’.¹⁰² First, competitiveness requires the increase of industrial capacity in several sectors (like batteries, hydrogen, and carbon storage¹⁰³). Second, competitiveness requires access to critical raw materials, sourced diversly and retained within the circular economy. Third, competitiveness requires the supply of renewable, and cheap, energy.¹⁰⁴ Importantly,

⁹⁸ Mariana Mazzucato, *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*; 1st ed. (Anthem Press, 2013); Mazzucato, *Mission Economy: A Moonshot Guide to Changing Capitalism* (Penguin UK, 2021).

⁹⁹ Industrial Policy 2020, p. 9. ¹⁰⁰ Net Zero Plan 2023, p. 4.

¹⁰¹ Net Zero Plan 2023, p. 1. ¹⁰² Net Zero Plan 2023, p. 3.

¹⁰³ Some of these technologies are controversial. See Frida Kieninger, ‘“Clean Hydrogen” Is the Fossil-Fuel Industry in Disguise’, *EU Observer* (2023), <https://euobserver.com/opinion/156899>, last accessed 9 January 2024; Inga Davis, ‘The Greenwashing Scam behind EU’s “Grey” Hydrogen’, *EU Observer* (2023), <https://euobserver.com/opinion/157518>, last accessed 9 January 2024.

¹⁰⁴ Net Zero Industry Act Proposal 2023, p. 6.

the understanding of competitiveness does not (so far) fall back to cutting labour costs. Rather, *‘Greater competitiveness must go hand in hand with well-paid quality jobs and investment in human capital’*.¹⁰⁵ Except for ‘academies’, however, neither the Net Zero Plan nor the Net Zero Industry Act adds much on how public support and investment should more directly contribute to “well paid jobs” or “the investment in human capital”.

5.3 Law as Burden

EU industrial policies stress abundantly the importance of law and regulation: *‘Legislation must be predictable and proportionate and provide the legal certainty required for longer-term investments’*.¹⁰⁶ In 2010, this proportionality and predictability seems to be put in question especially by environmental regulation: *‘since legislation in the past naturally focussed on tackling primary objectives (such as ensuring Single Market regulation, meeting environmental objectives etc.), potential spillovers on industrial competitiveness and in particular the cumulative impact of legislation was not always fully evaluated’*.¹⁰⁷

In order to ensure that *‘Environmental and industrial policies must go hand in hand’*¹⁰⁸ and that *‘environmental regulation can act as a beneficial lever for innovation and industrial development, rather than as an impediment’*,¹⁰⁹ the European Commission has committed to taking another step in what today is known as the ‘Better Regulation’ agenda. Namely, it committed in 2010 to introducing two new disciplines. First, *“fitness checks” will assess whether the regulatory framework for a policy area is fit for purpose and, if not, what should be improved’*.¹¹⁰ Second, *“ex post evaluation” of the effects of legislation on competitiveness. The systematic evaluations of legislation must become an integral part of smart regulation’*.¹¹¹

This focus on better regulation – understood here as predictability, proportionality, and competitiveness-friendliness – is not new in the EU at the time that the 2010 industrial policy was published. The ‘better regulation’ agenda dates to the beginning of the 2000s: the period that we have identified as “mature neoliberalism” in the chapter on consumption. At this time, a concern with “regulatory simplification” driven by demands of the industry and challenges in the WTO

¹⁰⁵ Net Zero Industry Act Proposal 2023, p. 2. ¹⁰⁶ Industrial Policy 2010, p. 20.

¹⁰⁷ Industrial Policy 2010, p. 6. ¹⁰⁸ Industrial Policy 2010, p. 20.

¹⁰⁹ Industrial Policy 2010, p. 20. ¹¹⁰ Industrial Policy 2010, p. 6.

¹¹¹ Industrial Policy 2010, p. 5.

tribunals,¹¹² combined with some admiration of American regulatory culture,¹¹³ will see the Prodi Commission issue a first Better Regulation package in 2002,¹¹⁴ on the basis of the White Paper on Governance.¹¹⁵ The package banked on impact assessments, consultations, transparency, and simplification of the regulatory framework as a way to improve both the quality and democratic standing of EU regulations.

The subsequent Barosso Commissions (2004–2014) have made “cutting red tape” and “promoting competitiveness” the two main regulatory objectives. The deregulatory agenda was to be further reinforced by introducing common methodologies, which place US-like cost-benefit analysis more central in EU policymaking, as well as installing an Impact Assessment Board to assess the quality of impact assessments. The ‘ex-post’ assessments, which are mentioned in the 2010 industrial policy, are part of that package. This agenda has been both criticised, mainly for its possible negative implications on the precautionary principle¹¹⁶, and fought by some DGs in the Commission who saw it as undervaluing the importance of regulations, in the interest of competitiveness (ie. business interests).¹¹⁷

The 2014 industrial policy tables, ‘*Top 10 regulatory burdens (as perceived by business organisations and stakeholders) will simplify EU legislation and reduce regulatory burden on businesses. Competitiveness Proofing has been fully integrated into the Commission’s impact assessments for all major proposals with significant effects on competitiveness*’.¹¹⁸ This cutting of regulatory burdens was, also an early concern in relation to the burdens imposed on oil-refining sector, where the fitness check was to be undertaken as one of the first and ‘*finalised in 2014. In the future, the Commission will gradually undertake comprehensive reviews of the competitiveness and regulatory*

¹¹² Warren H. Maruyama, ‘A New Pillar of the WTO: Sound Science’, *International Lawyer* 32, no. 3 (1998): 651–77.

¹¹³ Anne C. M. Meuwese, *EU–US Horizontal Regulatory Cooperation: Mutual Recognition of Impact Assessment?*, in *Transatlantic Regulatory Cooperation: The Shifting Roles of the EU, the US and California*, ed. David Vogel and Johan F. M. Swinnen (Edward Elgar Publishing, 2011).

¹¹⁴ European Commission, Action plan ‘Simplifying and improving the regulatory environment’ COM(2002) 0278 final.

¹¹⁵ European Commission, European Governance: Better lawmaking, COM(2002) 275 final.

¹¹⁶ Marija Bartl, ‘Regulatory Convergence through the Back Door: TTIP’s Regulatory Cooperation and the Future of Precaution in Europe’, *German Law Journal* 18, no. 4 (2017): 969–92.

¹¹⁷ Ragnar E. Lofstedt, ‘The ‘Plateau-ing’ of the European Better Regulation Agenda: An Analysis of Activities Carried Out by the Barroso Commission 1’, *Journal of Risk Research, Taylor & Francis Journals* 10, no. 4 (June 2007): 423–447.

¹¹⁸ Industrial Renaissance Plan 2014, p. 8.

frameworks in each of the main industrial value chains, using fitness checks and cumulative cost assessments'.¹¹⁹

Juncker's Commission will enact another Better Regulation package in 2015.¹²⁰ The package continues in the spirit of cutting regulatory burdens, expanding the methodological guidance, including giving more prominence to welfare economics' quantitative cost-benefit analysis, and, perhaps most importantly, turning the advisory Impact Assessment Board into a decision making 'Regulatory Scrutiny Board', which is to issue binding opinions on the quality of impact assessments. Populated mainly by economists and public administration scholars, this Board has been one of the greatest opponents of more transformative proposals,¹²¹ all the while only rubberstamping that which seemed not to step out of the neoliberal mainstream.¹²²

This institutional and methodological "strengthening" of the Better Regulation agenda seems to have been one of the ways in which the EU attempted to gratify its trading partners, the US and Canada in particular, with whom the negotiation of the free trade agreements had started around the same time. It was via these new regulatory disciplines that shared language is found for "regulatory convergence" and "regulatory cooperation".¹²³ As the Industrial Renaissance policy also makes clear, in the modern free trade agreements '*the primary focus will be on "behind-the-borders" obstacles to trade and investment. Raising the level of transparency and regulatory convergence will significantly enhance overseas opportunities for EU companies and help reduce the costs of accessing markets*'.¹²⁴ Given that American and Canadian counterparts were ardent challengers of the EU's precautionary principle in the WTO context,¹²⁵ exactly on the account that the EU has not been sufficiently rigorous with its methodologies for identifying and removing regulatory burdens, the

¹¹⁹ Industrial Renaissance Plan 2014, p. 8.

¹²⁰ European Commission, Better Regulation for Better Results – An EU agenda, COM(2015) 0215 final.

¹²¹ As we have discussed in the previous chapter on ecodesign and will return back to in Chapter 6 on corporation.

¹²² Corporate Europe Observatory, 'Corporate Sustainability Due Diligence File, "Better Regulation," and the Regulatory Scrutiny Board' (2022), <https://corporateeurope.org/sites/default/files/2022-11/Commission%20complaint%20CSDD%2015.7.2022%20FINAL.pdf>, last accessed 9 January 2024.

¹²³ Bartl, 'Regulatory Convergence through the Back Door'.

¹²⁴ Industrial Renaissance Plan 2014, p. 21.

¹²⁵ Rupert Read and Tim O'Riordan, 'The Precautionary Principle under Fire', *Environment: Science and Policy for Sustainable Development* 59, no. 5 (2017): 4–15.

precautionary principle had to be somewhat set aside to support trade cooperation in this period.¹²⁶

Another all-time favourite in the repertoire of the “cutting-regulatory-burdens” is the alleged protection of SMEs, as *‘Inflexible administrative and regulatory environments, rigidities in some labour markets and weak integration in the internal market’* need to be tackled, since the *‘regulatory and administrative costs can impact SMEs up to ten times more than larger companies’*.¹²⁷ The “think small first” principle, which the Commission announced in the 2014 Industrial Renaissance, sits uneasily, however, with the fact that the first regulatory fitness checks were done in industries that were hardly populated by SMEs – such as the aforementioned oil-refining industry.

The focus on cutting public regulatory burdens in the EU was complemented with a strong commitment to (private) standardisation. Thus, *‘In the regulatory domain, a particularly urgent need is for globally compatible rules and standards for newly emerging tradable goods, services and technologies’*.¹²⁸ The EU has an important role to play in *‘promoting international standards and regulatory cooperation, building on the EU’s role as a de facto standard setter and to take a leading role in reinforcing the international standardisation system’*.¹²⁹ While markets need rules, the competitive gains are higher if those are drafted by the industry itself.

After the EGD, the deregulatory narratives somewhat cede. In 2020, the Commission, instead, suggests that the EU needs to lead *‘by example complying with the highest social, labour and environmental standards, allowing Europe to project its values’*.¹³⁰ Not only values but also the differences between the power of various market actors need to be addressed. *‘In the SME Strategy, the Commission emphasised the need to enhance fairness in B2B relations to support SMEs which due to asymmetries in bargaining power with larger organisations face an increased risk of being subject to unfair business practices and conditions both online and offline’*.¹³¹ The mention of the concern with power between private parties is an important nod to the welfare-state imaginary of shared prosperity.

¹²⁶ Similarly, a “complicated relationship” has also been between trade and the EU’s flagship privacy concerns; see Kristina Irion, Svetlana Yakovleva, and Marija Bartl, *‘Trade and Privacy: Complicated Bedfellows?’*, *How to Achieve Data Protection-Proof Free Trade Agreements* (13 July 2016). Available at SSRN: <https://ssrn.com/abstract=2877166> or <http://dx.doi.org/10.2139/ssrn.2877166>.

¹²⁷ Industrial Renaissance Plan 2014, p. 17. ¹²⁸ Industrial Policy 2010, p. 17.

¹²⁹ Industrial Policy 2010, p. 21. ¹³⁰ New Industrial Strategy 2020, p. 2.

¹³¹ New Industrial Strategy 2020, p. 9.

With almost the same breath, however, the Commission suggests that it needs to maintain ‘*increased attention to regulatory burden under the Commission’s revised approach to Better Regulation*’.¹³² It is in particular a controversial, and US-inspired, “one in, one out” approach that has become the badge of honor of the Von Der Leyen Commission: ‘*by introducing a “one in, one out” approach adapted to the policymaking in the EU, it strengthens the attention of policymakers for the implications and costs of applying legislation, especially for SMEs*’.¹³³ This will come back also in 2023, as the ‘*additional “competitiveness check” on all new regulation to ensure that all potential competitiveness impacts are addressed and unnecessary burdens avoided*’.¹³⁴

The Net Zero Plan, and the accompanying legislation, arrives with a set of legal tools that aim to foster innovation. First, under the auspices of the Commission, it will work to ‘*establish regulatory sandboxes to allow for rapid experimentation and disruptive innovation to test new technologies*’.¹³⁵ These regulatory carve outs, so far applicable mainly to fintech, are now to be extended to clean tech under the Net Zero Industrial Act for the technology less ready for innovation. Second, the Commission will also work to ‘*reduce the length and enhance the predictability of permitting processes by defining specific time limits for different stages of permitting, and significantly reinforce Member States’ administrative capacity, e.g. by introducing a “one-stop-shop” – a sole point of contact for investors and industrial stakeholders during the entire administrative process*’.¹³⁶ We can find one-stop-shops in all relevant legislations, including the Net Zero Industrial Act and the Chips Act as well as for the strategic projects under the Critical Raw Materials Act.¹³⁷ Third, under the Chips Act, the Commission even creates a special legal form – the European Chips Infrastructure Consortium – which is an entity, with legal personality, designed in order to foster cross-border development of capacity.¹³⁸

5.4 Resourceful Government

When neoliberalism became the dominant imaginary of political economy, it changed how we think about government in terms of its capacity.

¹³² New Industrial Strategy 2020, p. 9. ¹³³ New Industrial Strategy 2020, p. 9.

¹³⁴ Net Zero Plan 2023, p. 3. ¹³⁵ Net Zero Plan 2023, p. 5.

¹³⁶ Net Zero Plan 2023, p. 5.

¹³⁷ Net Zero Industry Act Proposal 2023; Chips Act 2023; Critical Raw Materials Act Proposal 2023.

¹³⁸ Chips Act 2023, art. 7.

Given government's large inadequacies and knowledge problems, government was supposed to govern less, to do less and to own less – leaving as much as possible to the market. In turn, government that needs to do less also needs fewer capabilities, and thus we have seen a gradual dismantling of the capacity of governments (national and European) to govern – including their legislative and policy as well as financial and institutional capacities and resources.¹³⁹ Such incompetent government, however, does not fit with any stronger conception of industrial policy.

At the outset of its 2010 industrial policy wave, Europe was mainly concerned with improving the competitiveness of European industry, by fostering general conditions for industrial development. To this effect, '*closer co-operation with Member States and monitoring the success and competitiveness performance of policies at the European and Member State level*'¹⁴⁰ were called for in order to make the industrial policy successful. More specifically, the purpose of government on both levels was to improve industrial competitiveness via reducing burdens of regulation and labour (costs). This approach has only been made more prominent by the Industrial Renaissance policy in 2014, which comes with a concept of "Growth-Friendly Public Administration",¹⁴¹ with a particular understanding of what "best practices" in public administration should stand for.

Only with the EGD, the EU's 2019 'growth strategy', do we see a growing concern for the capacity of governments and resources put behind this public agenda – including taxation. Taxation, like industrial policy itself, has been shied away from by the EU, both because of its very limited competences and its ideological misfit with "competitiveness" narratives. The EGD, even if it relies predominantly on private investment, argues that '*Ensuring that taxation is aligned with climate objectives is also essential*'.¹⁴² The Commission additionally stresses the importance of national budgets. '*National budgets play a key role in the transition. (. . .) At the national level, the European Green Deal will create the context for broad-based tax reforms, removing subsidies for fossil fuels, shifting the tax burden from labour to pollution, and taking into account social considerations*'.¹⁴³

¹³⁹ Mariana Mazzucato and Rosie Collington, *The Big Con: How the Consulting Industry Weakens Our Businesses, Infantilizes Our Governments and Warps Our Economies* (Penguin Press, 2023).

¹⁴⁰ Industrial Policy 2010, p. 31. ¹⁴¹ Industrial Renaissance Plan 2014, p. 8.

¹⁴² European Green Deal 2019, p. 5. ¹⁴³ European Green Deal 2019, p. 17.

While the EGD has tabled a more general discussion, the 2020 Industrial Policy, as well as the NGEU (discussed below), tries to reinvigorate a more specific tax debate about the consolidated corporate tax base: *'Enhancing tax harmonisation would help remove one of the main obstacles faced by business when operating cross-border, notably by making a common consolidated corporate tax base a reality'*.¹⁴⁴ The later 2021 industrial policy announces a new approach, via *'the upcoming Communication on "Business Taxation for the 21st century" [which] will set out concrete plans to support both objectives, including concrete measures for SMEs'*.¹⁴⁵ Currently, the EU is pursuing several piecemeal measures, as much of its more ambitious attempts have been stranded. Perhaps the most important of those is the Minimum Corporate Tax directive,¹⁴⁶ building on the OECD agreement. Pundits remain concerned, however, that it's both too little and too leaky.¹⁴⁷

The question of taxing capacity is a fundamental one, not least in the context of green transition. Yet tax competition has instead placed serious limits on the income of states and limited their democratic agency.¹⁴⁸ These constraints are a particularly salient problem in the EU, where the EU internal market rules present infrastructure that enables tax competition among the MSs themselves – while at the same time European Treaties make serious attempts to make tax harmonisation close to impossible thanks to the unanimity rules.¹⁴⁹ Thus even if after post-2008 crisis it has become increasingly clear to the Commission that the tax competition in the EU has a plethora of negative consequences, competitive fiscal federalism remains a reality in the EU.¹⁵⁰

So how is the EU going to finance the transition, which will admittedly *'require massive public investment and increased efforts to direct private capital towards climate and environmental action, while avoiding lock-in into*

¹⁴⁴ New Industrial Strategy 2020, p. 5. ¹⁴⁵ New Industrial Strategy Update 2021, p. 10.

¹⁴⁶ Council Directive (EU) 2022/2523 of 14 December 2022 on ensuring a global minimum level of taxation for multinational enterprise groups and large-scale domestic groups in the Union.

¹⁴⁷ Thomas Tørsløv, Ludvig Wier, and Gabriel Zucman, 'The Missing Profits of Nations', *The Review of Economic Studies* 90, no. 3 (2023): 1499–534.

¹⁴⁸ Ibid.

¹⁴⁹ Consolidated Version of the Treaty on the Functioning of the European Union, Part Three – Union Policies and Internal Actions, Title VII – Common Rules On Competition, Taxation And Approximation of Laws, chapter 2 – Tax Provisions, arts. 110–3.

¹⁵⁰ Jussi Jaakkola, 'Taming the Leviathan or Dismantling Democratic Government? Evolving Political Ideas on Spontaneous Income Tax Integration in the European Union', *European Law Open* 2, no. 3 (2023): 575–615.

unsustainable practice?¹⁵¹ Only a year after the EGD, which relied heavily on private investment as a response to this question,¹⁵² the EU introduces a large funding package in response to the COVID-19 crisis: NGEU.

The details behind the NGEU are important, as they allow us to see how the EU can raise money as well as how a more solidary focused EU industrial approach could look like. The NGEU is the first occasion when states are engaging in significant common borrowing, *'by temporarily lifting the own resources ceiling to 2% of EU Gross National Income. This will allow the Commission to use its very strong credit rating to borrow €750 billion on the financial markets for Next Generation EU'*.¹⁵³

Unlike the recovery programmes after the 2008 crisis, the NGEU is a joint financing instrument, revolving around solidarity and fairness, as *'Left to individual countries alone, the recovery would likely be incomplete, uneven and unfair'*.¹⁵⁴ In terms of the distribution of funds, the special needs of the country were considered, and thus some countries, such as Italy or Croatia, have received far bigger packages than stronger economies: in the case of Croatia, the package (grants and loans) is 27 per cent of its GDP.¹⁵⁵ The funds were to be used to finance the EU's twin transition, digital and green, and included a commitment that public investment must respect the green oath to *'do no harm'*. Importantly, given its green objectives, the Recovery and Resilience plans that countries develop in order to tap into the funding are referenced regularly as a stream of funding in the upcoming industrial policies, including, importantly the Net Zero Industrial Act.

In order to repay the borrowed funds, the Commission will rely on the EU's future budgets (up to 2046), with several new financial streams coming into play, including the Emissions Trading Scheme, the Carbon Border Adjustment Mechanism, financial transaction tax, a new digital

¹⁵¹ European Green Deal 2019, p. 2.

¹⁵² EuroMemo Group, 'EuroMemorandum 2020', www.euromemo.eu/euromemorandum/euromemorandum_2020/index.html, last accessed 9 January 2024.

¹⁵³ Repair and Prepare for the Next Generation 2020, p. 4.

¹⁵⁴ Repair and Prepare for the Next Generation 2020, p. 3; moreover, in the Net Zero Plan the Commission announces that it will put forth a proposal for the European Sovereignty Fund, in order to create a new instrument to counter the asymmetrical development among the EU MSs.

¹⁵⁵ European Commission – Press release, 'NextGenerationEU: European Commission Endorses Positive Preliminary Assessment of Croatia's Request for €700 Million Disbursement under the Recovery and Resilience Facility' (2022), https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6654, last accessed 10 January 2024.

tax, VAT on non-recycled plastics, or similar.¹⁵⁶ The Net Zero Plan clarifies indeed that the Emissions Trading Scheme as well as the Carbon Border Adjustment Mechanism incomes will be used for green industrial policy.

In reaction to the Net Zero Plan, the European Parliament has called on the Commission to be more ambitious in proposing new resources, as ‘new own resources are a key enabler for the Union to implement its policy priorities’¹⁵⁷ and it is necessary to ‘avoid new EU priorities being financed to the detriment of existing EU programmes and policies’.¹⁵⁸ More specifically, the European Parliament ‘urges the Commission and the Member States involved in the negotiations on the enhanced cooperation to do their utmost to reach an agreement on the **financial transaction tax** before the end of June 2023; asks, in addition, the Commission to be even more ambitious and come forward with proposals for new genuine own resources’.¹⁵⁹ In that regard, the European Parliament also strongly supports the proposal for the European Sovereignty Fund, mentioned earlier, and says that it should not be financed at the expense of cohesion funds that have already been committed to.¹⁶⁰

But the capacity of the government goes beyond just the question of financial resources. It requires competent public officials, well-organised institutions and systems, professionalism, and commitment to the rule of law. The 2020 industrial policy picks up one specific aspect of public competence that aligns with its “entrepreneurial spirit”: ‘that as we step up investment in disruptive and breakthrough research and innovation, we must accept failure along the way. This helps us to learn, adapt and, if necessary, reset our way of doing things to allow us to move forward. We must shift our mind-set from risk averse to failure tolerant’.¹⁶¹

What the policy does not pick up is the question of *public benefit, voice, and ownership* in publicly supported and financed ventures. While the policy seems inspired by Mazzucato’s approach, not even the inoffensively sounding “portfolio approach” to investments has made its way into the document: that is, funding broadly, but participating both in success and failure, so that successes can finance future investment.¹⁶² The continuous deference to markets can also be seen from the fact that

¹⁵⁶ Repair and Prepare for the Next Generation 2020, p. 4.

¹⁵⁷ European Parliament resolution of 16 February 2023 on an EU strategy to boost industrial competitiveness, trade, and quality jobs (2023/2513(RSP)), p. 7.

¹⁵⁸ *Ibid.* ¹⁵⁹ *Ibid.* ¹⁶⁰ *Ibid.* ¹⁶¹ New Industrial Strategy Update 2021, p. 10.

¹⁶² Mazzucato, *Mission Economy*.

the EU's industrial policy does not impose practically any conditionalities – with a small exception from the Chips Act, which provides for obligatory supplies in times of crisis¹⁶³ – remaining thus firmly within the neoliberal approach of socialising the risks and privatising the benefits.

5.5 The Contours of the New Imaginary of Prosperity: or *Im Westen nichts Neues*?

Is there any trace left of a move to a different imaginary of political economy when it comes to the EU's industrial policy? If the EGD is a green growth strategy that should '*transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use*',¹⁶⁴ what kind of political economy does it need? If '*The transition can only succeed if it is conducted in a fair and inclusive way*',¹⁶⁵ how are green, social, and democratic elements brought together in the imaginary that is being shaped here? And, even more in line with the spirit of this book, are there any nods to a more radical departure from the neoliberal toolkit?

We have seen three important shifts in the economic imaginaries behind industrial policy. First, we could observe a shift away from pursuing "everything goes growth" to pursuing "green growth", complicating thus the story of growth altogether. Second, in order to have that green growth, more *public steering* of the economy is necessary – markets will not get us there on their own. In terms of division of labour, that steering should increasingly happen at the EU level, with financing remaining a problem. Third, future "competitiveness" should build on advanced technologies, rather than on cheapening labour – even if the relation of new technologies towards sharing with labour remains unarticulated.

Legal and institutional imaginaries behind industrial policies have also seen a certain development. We have observed the proliferation of 'one-stop-shops' carried through most legislative acts, suggesting that one way to support sectors is to create effective institutional support. The Chips Act is by far the most interesting piece of legislation: having gone through a longer period of preparation, it has large institutional

¹⁶³ Chips Act 2023, art. 23. ¹⁶⁴ European Green Deal 2019, p. 2.

¹⁶⁵ European Green Deal 2019, p. 16.

ambitions, aiming to create a European ‘Chips Joint Undertaking’, a kind of ‘DARPA’ or ‘Cybersyn’, in this European “moon-shot mission”.¹⁶⁶ It also creates a new legal entity, ‘European Chips Infrastructure Consortium’, as a special-purpose vehicle for large-scale investment and cooperation in the industry. This all happens at the background of the government, or public, steering the economy in desirable directions, complemented by the EU’s attempt to muster more funding in order to accomplish this.

Where the EU does not make a step forward is in its conception of politics. Put together in haste, it seems that the EU will enable both national and European funding to flow to various industries, without a broader political discussion as to what priorities the transition should pursue. It matters, however, whether the EU invests significant public funds into hydrogen or carbon capture, electric vehicles or public transport, geoheating pumps, or the isolation of houses. While hydrogen and carbon capture seem to present a public financing stream to the fossil fuel industry, despite their overwhelming profits historically and most importantly in recent years, subsidies to electric vehicles may benefit the car industry – but perhaps at the expense of developing more broadly available public transport, or immiseration of third countries providing critical materials. Whatever the trade-offs are, more public debate around the choices would be fundamental to ensure ‘*fair and inclusive transition*’.¹⁶⁷

Overall, the EU industrial policy has seen a couple of paths not taken, or even reversals, on issues where a more transformative approach was nodded to. Consider the 2020 attempt to push the EU to become Mazzucato’s “entrepreneurial state”. Or the recognition – without actual public support – for social economy. Let me briefly outline a few missed opportunities to institute the imaginary of shared prosperity more deeply.

First, the industrial policy remains in the old scheme of privatising profits while socialising risk. There is little to no mention of any conditionality as it concerns the use of public money, including the consequences this has for the distribution of profits on the one hand and any “above the standard” social and environmental performance on the other. For instance, the US Inflation Reduction Act, despite its difficult path towards adoption and the costs that it took the current administration,¹⁶⁸ introduces some elements that can make progress more shared. For instance, it makes the size of tax credits and subsidies

¹⁶⁶ Mazzucato, *Mission Economy*. ¹⁶⁷ European Green Deal 2019, p. 16.

¹⁶⁸ Conditionality in the US Inflation Reduction Plan has been paid for by cutting the democratic promise of universal free childcare in the US.

dependent on the ‘prevailing wage and registered apprenticeship requirements’, that is on the higher wage usually paid by the public sector and set by the secretary of labour,¹⁶⁹ or it limits the distributions of public funds to shareholders via dividends of share buybacks.¹⁷⁰

Also the European Parliament observes this peculiar tendency and ‘[c]alls on the Commission and the Member States to make EU funding conditional on relevant requirements linked to public policy objectives, in particular social, environmental and financial requirements, and respect EU labour rights, standards and improved working conditions, which should be fulfilled by beneficiaries for as long as they receive public support, while ensuring fair and open competition, a level playing field between our companies, and respect for the fundamental principles on which our single market is based’.¹⁷¹ The Net Zero Plan, however, still seems to subscribe to “trickle down economics” when it comes to what happens among private actors: but what historical experience is there to suggest that public money will trickle down into ‘well-paid quality jobs’ that the Commission promises?

Second, the EU’s industrial policy seems to be quite one-sidedly sensitive when it comes to international economic relations. ‘Where the public footprint in private markets is outsized, distortions create an unlevelled playing field and unfair competition emerges. A particular concern exists in respect of non-market economies. The EU wants to lead a robust response to address these trends’.¹⁷² But what about the private footprint that creates distortions, an unlevel playing field, and leads to unfair competition? Multinational corporations, of which some European, have had a large negative footprint in global markets, and in particular on the economic conditions in the Global South.¹⁷³ But it goes further. Scholars working on the implications of green transition have warned against the tendencies of “green extractivism” that are already exacerbating land grabbing, worsening water availability, and thus also food security, indebting countries with costly infrastructures, while providing little to no jobs

¹⁶⁹ Inflation Reduction Act 2022, Subtitle D, Part 1(f).

¹⁷⁰ In a recent paper, Mazzucato and Rodrik articulate the types of conditionalities that we have seen across the globe, as well as some of their benefits. See Mariana Mazzucato and Dani Rodrik, ‘Industrial Policy with Conditionalities: A Taxonomy and Sample Cases’, Working paper WP 2023/07, Institute for Innovation and Public Purpose, 2023.

¹⁷¹ European Parliament resolution, EU strategy to boost industrial competitiveness, trade, and quality jobs, p. 7.

¹⁷² Net Zero Plan 2023, p. 2.

¹⁷³ Florian Wettstein, ‘The History of Business and Human Rights and Its Relationship with Corporate Social Responsibility’, in *Research Handbook on Human Rights and Business*, ed. Surya Deva and David Birchall (Edward Elgar Publishing, 2020), 23–45.

for local populations.¹⁷⁴ In the context of the disproportionate impact of the climate crisis on those developing countries, including the migration pressures, this seems like a dangerous strategy to take.

The Critical Minerals Action Plan only underscores the extractive logics of EU industrial policy as ‘*undistorted trade and investment in raw materials in a manner that supports the EU’s commercial interests*’.¹⁷⁵ The Critical Raw Materials Act gives very few indications on the terms of ‘strategic partnerships’, or the degree of sharing of benefits of economic cooperation.¹⁷⁶ The EU funding instrument, Global Gateway, also seems to miss the mark in many countries,¹⁷⁷ while the EU shows little commitment to deal with the urgent question of debt that is decimating both the social and environmental chances of developing countries.¹⁷⁸

Third, one important road *not* taken towards greater sharing internally and externally, is the still lacking support for social economy. Even if mentioned in several contexts – it is also where it ends. For instance, the 2011 industrial report argues that ‘*Developing social entrepreneurship, social businesses and the social economy is another important tool for strengthening the competitiveness and the sustainability of the European industry. The social economy employs over 11 million people in the EU, accounting for 6% of total employment and approximately one in four businesses founded in Europe is a social enterprise. This figure rises to one in three in Belgium, Finland and France. These companies are often highly productive and competitive, due to the very high level of personal commitment on the part of their employees and the better working conditions that they provide*’.¹⁷⁹ The 2014 Industrial Renaissance policy promises ‘*the new rules on European Venture Capital Funds and European Social Entrepreneurship Funds create a special EU passport for fund managers investing in start-up SMEs and social businesses*’,¹⁸⁰ while the NGEU suggests that a ‘*strong social economy can offer unique opportunities to help*

¹⁷⁴ Bruna, ‘A Climate-Smart World and the Rise of Green Extractivism’.

¹⁷⁵ Critical Raw Materials Plan 2020, p. 15.

¹⁷⁶ Critical Raw Materials Act Proposal 2023.

¹⁷⁷ Joint Communication to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank: The Global Gateway, JOIN(2021) 30 final.

¹⁷⁸ Ulrich Volz et al., ‘Addressing the Debt Crisis in the Global South: Debt Relief for Sustainable Recoveries’, Other (SOAS WP, 2022), www.think7.org/publication/addressing-the-debt-crisis-in-the-global-south-debt-relief-for-sustainable-recoveries/, last accessed 10 January 2024.

¹⁷⁹ European Commission Staff Working Paper, Member State Competitiveness Performance and Policies (2011 report), SEC(2011) 1187 final, p. 8.

¹⁸⁰ Industrial Renaissance Plan 2014, p. 12.

most vulnerable to return to the labour market'.¹⁸¹ The 2020 CEAP underscores 'The potential of the social economy, which is a pioneer in job creation linked to the circular economy, will be further leveraged'.¹⁸² But at some other time and place.

Equally, a more realistic and solidarity approach to SMEs in legal relations has not been seriously advanced in the policy. In the 2020 industrial policy, the Commission reminds that 'In the SME Strategy, the Commission emphasised the need to enhance fairness in B2B relations to support SMEs which due to asymmetries in bargaining power with larger organisations face an increased risk of being subject to unfair business practices and conditions both online and offline'.¹⁸³ However, while a more realistic, relational approach to contracting would present a better application of the "think small first" principle in industrial policy, it does not return in the legislative measures.

To conclude. The 2023 Net Zero Plan and the legislative measures in its wake are techno-optimist in the tritest sense. Once technology is there, everything else will follow: 'The starting point for the Plan is the need to massively increase the technological development, manufacturing production and installation of net-zero products and energy supply in the next decade, and the value added of an EU-wide approach to meet this challenge together'.¹⁸⁴ In this technological race, there is no time for deliberation about priorities or public voice and benefit.

Yet the question remains: to be first at what? Who is shaping the choices about collective investment? For instance, the question of green (and other coloured) hydrogen is a strongly divisive issue, as the question of its feasibility and distributive effects ranks high.¹⁸⁵ Also, who will ultimately profit from those investments? The Net Zero Plan unapologetically embraces and aims to publicly finance all kinds of clean tech – that may neither be that clean, nor fairly shared in terms of their benefits.

Clearly, the EU is doing more than many MSs in terms of greening the economy, as the Commission has fewer constraints in terms of short political cycles or social media frenzy. Yet, at the same time, the choices

¹⁸¹ Repair and Prepare for the Next Generation 2020, p. 10.

¹⁸² Circular Economy Action Plan 2020, p. 15.

¹⁸³ New Industrial Strategy Update 2021, p. 9. ¹⁸⁴ Net Zero Plan 2023, p. 3.

¹⁸⁵ Kieninger, "Clean Hydrogen" Is the Fossil-Fuel Industry in Disguise'; Camilla Hodgson, 'Banks and Oil Groups Place Bets on Carbon Capture Schemes', Financial Times (2023), www.ft.com/content/7aa77038-62b6-4761-9ce3-1e0647ffb607?shareType=nongift, last accessed 10 January 2024; America Hernandez and Simon Van Dorpe, 'EU Goes Big on Hydrogen as Gas Crunch Looms', Politico (2022), www.politico.eu/article/industrial-hydrogen-state-aid-technology/, last accessed 10 January 2024.

that the EU makes have to be *right* choices, not least because much depends on its capacity to deliver shared prosperity. The EU must search for ways of making those choices in a democratically more robust way, without relying predominantly on knowledge supplied by fossil industry or car producers.¹⁸⁶ The Conference on Europe presented one way in which Europe could get in touch with reflective positions of the European citizens: such a conference may also be needed for the EU to develop a more democratically robust industrial policy, which could provide a credible hope for a liveable future - of people with practical education, of all age cohorts, including those living in European rural or peripheral regions, all the while not forgetting our growing debt toward Global South.

¹⁸⁶ Davis, 'The Greenwashing Scam behind EU's "Grey" Hydrogen'.