Preface

The 2023 symposium of the Netherlands Comparative Law Association on the energy transition took place at the University of Groningen. As the symposium was scheduled to precede the annual meeting of the Common Core Project at the same University, which was dedicated to the theme of sustainability, attendees of the Common Core meeting were also invited and present at our symposium. Our speakers carried the day: Miriam Anderson (University of Barcelona), Kati Cseres (University of Amsterdam), Niels Graaf (University of Amsterdam), Ines Hoving (Utrecht University), and Bernhard Kreße (University of Hagen). We were delighted, in particular, to have in our audience Prof HU (Ulli) Jessurun d'Oliveira, the 1968 founding boardmember and past president of the Netherlands Association of Comparative Law and honorary member, as well as one of its first members prof. JHM (Huub) Willems. Marjolein Dieperink (AKD; Free University Amsterdam) could not attend but eloquently underlined the need to compare national legislation and policies on corporate responsibility. Björn Hoops and Leon Verstappen provided academic hospitality in Groningen and its University. Student-assistants Crt Groselj, Justin Qiu (both University of Groningen), and Mark van der Kooi (Utrecht University) provided technical assistance and kept minutes of the presentations and Q&A sessions. The notes were unfortunately lost *sine culpa* in academic diaspora, happily found again, and diligently reconstructed in publishable form by Mark van der Kooi, in April 2024, when sweet showers fell.

Jaap Baaij, Michael Milo, Marieke Oderkerk

The Energy Transition from a Comparative Perspective – An Introduction

The transition to sustainable energy has arrived. Fuelled by the European `Green Deal' policy[1] and national initiatives, crude oil, natural gas, and coal must be replaced by more durable energy sources. The energy transition raises existential ecological questions for our and future generations[2] from social, economic, and political domains. Such questions involve energy poverty,[3] the stability and efficiency of supply and demand in energy networks, and the reshaping of contractual relations among various new actors in the energy market, such as energy communities, peer-to-peer platforms, and so-called aggregators.

The energy transition requires the law to facilitate and regulate, by carrot or by stick, the ensuing societal and technological transformations. The transition asks the law to reimagine the formal and informal arrangements for the energy supply, from production, transport, and trade to distribution and consumption. International treaties cover these arrangements, secondary EU laws ('fit for 55-package'),[4] national laws, and self-regulation, and involve both public and private institutions and actors.

As the energy transition, by its nature, is a universal topic and crosses boundaries of jurisdictions, comparative law is eminently appropriate to rethink analytically and synthetically how local, national, supra- and international law can facilitate the transition. The speakers at the Netherlands Association of Comparative Law Symposium in May 2023 addressed various questions. For example, are current and proposed laws sufficient to accommodate the transition, and should legislators or courts take the lead to move the law forward? Which duties do juristic persons have in their legal relations, individually and as director, owner, or contracting party on the energy market? Which role should voluntary corporate social responsibility play? May mandatory rules of long-standing private law arrangements, such as accession and the unity principle, prohibit new arrangements serving housing sustainability? Which conduct may be expected from citizens as energy consum-

1. COM(2019) 640 final, <https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en>.
2. Already signalled in 1970, see Club of Rome, *The Limits to Growth*, <https://www.clubofrome.org/publication/the-limits-to-growth/> (accessed last 25 June 2024).
3. M Wewerinke-Singh, 'A Human Rights Approach to Energy: Realizing the Rights of Billions within Ecological Limits' (2021) Review of European Comparative & International Environmental Law.
4. European Commission, *Delivering the European Green Deal. On the path to a climate-neutral Europe by 2050*, <https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en> (accessed last 25 June 2024).

ers? When public or private juristic persons are liable for duty of care infringements, given the Dutch landmark court decisions in *Urgenda* and *Shell*? Moreover, how can we benefit from comparisons with energy transitions in the past – such as the move towards natural gas in the Netherlands in the 1960s – and other historical and societal transitions, such as the industrial and the internet revolution?

This book captures the contributions on these and other issues discussed by the speakers at the 2023 Symposium. Kati Cseres[5] provided a consumer perspective on the energy transition in the European Union and in the jurisdictions of The Netherlands and Hungary. Her contribution reads *Varieties of Energy Transition: A Consumer-focused Perspective*. Bernhard Kreße addressed transitions in German law: *Sustainability Issues in the Supply and Value Chain under German Law*.[6] Miriam Anderson dealt with Spanish and Catalan perspectives concerning the renovation of residential property: *The Renovation Wave of Buildings:*
Spanish and Catalan Private Law Perspectives.[7] Related to that are the core property law issues involved concerning the identity of buildings – under which conditions are solar panels considered a part of the building? Dutch law is rather strict in this regard, which is the topic addressed by Ines Hoving: *Solar Panels-on-roof Constructions as 'Scheinbestandteile*.[8] Niels Graaf analysed the fund subsidies behind the European energy transition and the state-aid regime: *Winners and Losers of the EU's New State Aid Regime. Comparing National Funding for the Energy Transition*.[9]

The editors

5. Associate Professor of Law, Amsterdam Centre for European Law & Governance, University of Amsterdam, The Netherlands. She also wrote 'Consumer Social Responsibility in Dutch Law. A Case Study on the Role of Consumers in Energy Transition' (2019) 4 Erasmus Law Review and 'The Active Energy Consumer in EU Law' (2018) 9(2) European Journal of Risk Regulation 227-44.
6. Lehrstuhl für Bürgerliches Recht, Deutsches und Europäisches Wirtschaftsrecht, Energierecht und Rechtsvergleichung, FernUniversität in Hagen.
7. Associate Professor of Civil Law, University of Barcelona.
8. Ines Hoving LLM, Candidate civil-law notary, Houthoff Lawyers. Ines read law at the University of Utrecht (master notarial law), and at the University of Amsterdam (master Information law) – at the time of the conference. As a student she already published various scholarly articles. See eg 'Max van Drunen en Ines Hoving, Verduurzaming van gebouwen met een WKO of WKK' (2022) WPNR.
9. Dr.mr. Niels Graaf, Assistant Professor of Constitutional Law, University of Amsterdam.

Varieties of Energy Transition: A Consumer-focused Perspective

Kati Cseres*

1 Introduction: the energy transition and the role of consumers

The transition to sustainable energy is a pathway towards transforming the global energy sector by reducing greenhouse gas emissions and replacing fossil fuels with renewable energy in order to mitigate the effects of climate change. It is a change in the primary form of energy consumption of societies, which involves a complex and multifaceted process with technological, social, economic and political dimensions. The energy transition is profoundly affected by the characteristics of renewable energy sources, which are different from those of conventional technologies, such as increased dependency on weather and fewer possibilities to control production. Renewable energy has the advantage of being carbon neutral during electricity generation, however, its integration into current electricity systems poses additional challenges. The physical nature of renewable energy sources means that the generation of energy becomes more variable, less predictable and decentralised compared to traditional generation.[1] One prominent solution to this challenge offered by policy-makers has so far focussed on integrating flexibilities that consumers can offer for improved matching of the variability or intermittency of renewable energy sources with electricity demand.[2] Hence, consumers could play a fundamental role in achieving the flexibility necessary to adapt the electricity system to variable and distributed renewable electricity generation and contribute to the transition to a sustainable energy system.

The question this article tackles is how institutions and the broader political-economic context shape the social context where consumers operate. The diversity of institutional models implemented in the national economies of the EU Member States shape the way the relationship between markets, states and consumers develops as well as the way energy transition policies and the role of consumers therein is taking place. In light of the legal, political and social complexity of energy transition, the article offers a critical analysis of how two Member States, the Netherlands and Hungary, while seemingly both converging with EU Directives, when analysed in their broader political-economy context, represent two opposing ways of using energy law to steer consumers towards or constrain them from sustainable energy consumption.

---

* Dr KJ Cseres is Associate Professor of Law, Amsterdam Centre for European Law & Governance (ACELG), University of Amsterdam, k.j.cseres@uva.nl

1. I Diestelmeier, *Unlocking Flexibility with Law: developing a Legal Framework for Smart Electricity Systems* (University of Groningen 2019) 9.
2. Dynamic prices could function as a financial incentive for consumers to adjust their demand. Demand flexibility thus becomes of essential value with an increasing amount of RES.

Consumer behaviour, both as participants in sustainable energy consumption and its production is an important aspect of the energy transformation. The technological setting of today's energy markets enables consumers to manage their consumption and thus reduce their energy bills while participating actively in the shift from fossil fuels to renewable sources. The availability of low-cost technological devices enables consumers to use technologies, such as rooftop solar panels, batteries and smart meters and directly control and manage their individual consumption patterns. This, arguably, provides strong incentives for efficient energy use if combined with time-dependent electricity prices.[3] Internet-based metering and trading solutions enable even consumer households to generate and store electricity. Consumers can sell generated electricity, offer flexibilities in demand and provide balancing services for maintaining system operation which becomes increasingly valuable for integrating variable renewable energy sources.[4] In this way, consumers become prosumers.[5]

However, the consumers' capacity to drive sustainable consumption is subject to various constraints. First, despite the fact that households often express strong support for sustainable energy consumption, for example willing to pay for green electricity, these attitudes are seldom reflected in actual behaviour.[6] For example, Dutch citizens show a positive attitude toward making the energy supply more sustainable, however, surveys showed that sustainability is relatively low on Dutch citizens' agenda.[7] On the other hand, Hungarian citizens do not consider climate change a central issue, even though there is a higher than average (76%) support for the common European energy policy.[8] Hungary is lagging behind other European countries in terms of both renewable energy utilisation and community energy, as well as supporting the transition to a prosumer culture, all of which would require a more flexible and less centralised energy system.

Second, in the current electricity sector the possibility to offer demand flexibility depending on dynamic prices is mostly directed towards large consumers and po-

3. Smart energy technology can automatically follow price fluctuations and offer accurate and frequent information to consumers on their consumption and it enables them to adjust their behaviour accordingly to the price signals.
4. L Diestelmeier, 'Changing Power: Shifting the Role of Electricity Consumers with Blockchain Technology – Policy Implications for EU Electricity Law' (2019) Energy Policy 189-196.
5. Prosumers are consumers who start generating electricity primarily for their own needs. See Directive 2018/2001 on 'renewable self-consumer'. The term 'prosumer' originally coined by Alvin Toffler (1980) refers to the development of the people's participation in markets from being passive consumers to active participants in production, maintenance and repair of consumer goods. S Eden, 'Blurring the Boundaries: Prosumption, Circularity and Online Sustainable Consumption through Freecycle' (2017) 17(2) Journal of Consumer Culture 265–85.
6. C Berglund, S Matti, 'Citizen and Consumer: The Dual Role of Individuals in Environmental Policy' (2006) 15(4) Environmental Politics 553. A Hansla, A Gamble, A Juliusson, T Gärling, 'Psychological Determinants Of Attitude And Willingness to Pay for Green Electricity' (2008) 36(2) Energy Policy 768-774. C Dalhammar, 'It Is Never Too Late to Give Up, or Is It? Revisiting Policies for Sustainable Consumption' in O Mont (ed), *A Research Agenda for Sustainable Consumption Governance* (Edward Elgar Publishing 2019) 137-155.
7. Dutch citizens also estimate the share of renewable energy to be higher than it is in reality. See *Pubieksmonitor Klimaat en Energie* (Motivaction 2019) 7-8 and *Integrated National Energy and Climate Plan (NECP) 2021-2030, Netherlands* (2019) 12.
8. I Bart, D Csernus and F Sáfián, *Analysis of Climate-Energy Policies & Implementation in Hungary* (National Society of Conservationists–Friends of the Earth Hungary 2018).

tential flexibilities of small consumers located at the distribution grid level remain ineffective.[9] This has been especially so in the Netherlands, where energy policies and subsidies generally aim at large corporate projects with high profitability. Citizen projects with their typically modest revenue models fit much less into this policy.[10]

Third, an important finding of sociological research on sustainable consumption is that individual consumers' decision making is influenced by various institutional factors such as social institutions, consumer culture or collective behaviour.[11] Consumption is socially embedded and is shaped by existing (unsustainable) institutional settings and infrastructures.[12]

Due to these legal, social and market boundaries, consumers are often 'locked in by circumstances' and unable to engage in more sustainable consumption practices even if they want to.[13] This is certainly the case in Hungary, where energy law and governance have been shaped by path dependencies of wasteful energy practices that were ingrained in the institutions that for decades set central targets for energy allocation, and encouraged energy consumption and discouraged efficient energy production, use and distribution.

In an attempt to steer consumption towards sustainability national governments and supranational organisations have adopted policies and corresponding legislation that address individual consumers as rational and active choice-makers who make socially responsible choices when they receive the 'right' amount of information.[14] Accordingly, legislators and policy makers have placed the responsibility for the energy transition on consumers.[15]

The European Commission's Clean Energy Package[16] placed consumers at the *centre* of the EU's energy policy and implements a broad range of initiatives to make consumers an active part of the clean energy transition.[17] Similarly, EU Member

9. Diestelmeier (2019) at 132.
10. S Akerboom, F van Tulder, 'Consumer (Co-)Ownership in Renewables in the Netherlands' in J Lowitzsch (ed) *Energy Transition – Financing Consumer Co-Ownership in Renewables* (Palgrave Macmillan 2019).
11. E Shove, 'Beyond the ABC: Climate Change Policy and Theories of Social Change' (2010) 42(6) Environment and Planning A: Economy and Space 1273-1285 <https://doi.org/10.1068/a42282>.
12. E Heis kanen, S Laakso, 'Editing out Unsustainability from Consumption: From Information Provision to Nudging and Social Practice Theory' in O Mont, *A Research Agenda for Sustainable Consumption Governance* (Edward Elgar Publishing 2019) 157. The Swedish Environmental Protection Agency, Sustainable Consumption, research and policies, Report (2005) 58.
13. C Sanne, 'Willing Consumers—or Locked-In? Policies for a Sustainable Consumption' (2002) 42 Ecological Economics 273.
14. Heiskanen, Laakso (2019)
15. O Mont, 'Introduction to a Research Agenda for Sustainable Consumption Governance' in *A Research Agenda for Sustainable Consumption Governance* (Edward Elgar Publishing 2019).
16. Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (OJ L 158, 14.6.2019, p 125-199).
17. Commission Communication of 25 February 2015, 'A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy', Commission Communication of 15 July 2015, 'Delivering a New Deal for Energy Consumers'; New Consumer Agenda – Strengthening consumer resilience for sustainable recovery, COM(2020) 696 final.

States have also been drafting and implementing ambitious energy transition and climate change laws and policies. However, the diversity of institutional models implemented in the national economies of the Member States[18] shape both the way the relationship between markets states and consumers develops as well as the way energy transition policies and the role of consumers therein is taking place.

After having assessed the complex processes and socio-technical dimension of energy transition and identified the role of consumers and their alleged responsibility in this process, the next section turns to which legislation and policies the EU has adopted as a supranational organisation to steer and facilitate the role of consumers in the energy transition. The article then moves to address the broader political economy of the energy transition, and the last two sections provide an analysis of the case studies of the Netherlands and Hungary. The article finds that political-institutional differences between countries reveal how the complex mechanisms of coordination among a large number of market and non-market actors shape the energy transition. As individual consumers' decision making is influenced by various institutional factors and consumption is socially embedded and is shaped by existing (unsustainable) institutional settings and infrastructures, the role of state remains central given its legal authority and the ability to reshape the interactions of other actors, most notably consumers. The energy transition shows how formal legal rules can seemingly converge and harmonise towards EU provisions, while the wider political economic context provides a deeper and closer imprint of the actual state of transition policies.

2 EU law

Electricity markets across Europe form part of the EU internal energy market and as such they have gone through profound changes as a result of the EU market liberalisation process from 1996. National electricity systems and policies have been transformed by the various requirements of the EU Directives over the past two decades. As the EU's renewable and decarbonisation agenda has a significant impact on national electricity policy, this section will provide a short overview of the current EU energy law and policy developments that shape national laws and policies concerning the role of consumer.

In 2015 the Commission adopted the *Energy Union Strategy* that laid out a pathway for transition to a decarbonised energy sector that delivers sustainable, secure, competitive and affordable energy. To implement the objectives of the Energy Union Strategy, the EU Commission proposed the *Clean Energy for All Europeans* package in 2016 for the internal electricity market[19] and the legislation entered

18. M Varju, M Papp 'Varieties of Member State capitalisms and the European economic constitution. A folly or flexible framework? In Varieties of Member State capitalisms and the European economic constitution. A folly or flexible framework?' In: Achilles, Skordas; Gábor, Halmai; Lisa, Mardikian (eds.) Economic Constitutionalism in a Turbulent World Cheltenham, (Edward Elgar Publishing 2023) pp. 136-160.
19. Proposal for a Directive on common rules for the internal market in electricity, COM (2016) 864 (Electricity Directive) and COM (2016) 861 (Electricity Regulation).

into force as the Fourth Package in 2019.[20] The Package encompasses eight legislative documents that facilitate a 'consumer centred clean energy transition' and reform the design and operation of the European Union's electricity market. One of the main goals of the package was to realise a clean energy system through the active participation of consumers in energy markets.[21] Likewise, the Commission proposed a revised Renewable Energy Directive to ensure that the target of at least a 27% share of renewables in the total amount of energy consumed in the EU by 2030 is met.[22] The revised Directive 2018/2001[23] establishes a new binding renewable energy target for the EU for 2030 of at least 32%, with a clause for a possible upwards revision by 2023.

In 2022, the European Commission responded to the global energy market disruption caused by Russia's invasion of Ukraine with its REPowerEU Plan,[24] with the aim to reduce dependence on Russian fossil fuels by fast forwarding the clean transition and joining forces to achieve a more resilient energy system and a true Energy Union. In 2023 this was followed by a Commission proposal[25] to revise the rules for electricity market design and to improve the EU protection against market manipulation in the wholesale energy market. It aimed at making the EU energy market more resilient and making the energy bills of European consumers and companies more independent from the short-term market price of electricity. The proposal put forward measures to protect consumers from such volatility, empower them with greater contract choice and more direct access to renewable and low carbon energy. As this is still a proposal, hereafter, I discuss the current rules as established by Directive 2019/944.

2.1 The 2019 energy market design: a legal framework for active consumer participation

Perhaps one of the most important features of the EU's energy market design of 2019[26] was that it put the active participation of consumers at the centre of the energy transition. Instead of being dependent on a top-down energy model, consumers should actively manage their own consumption and even (co-)produce their own energy. The 2019 EU rules aimed at making it easier for individuals to

20. The Winter Package consists of legislative measures to facilitate the transition to a clean energy economy. The overall objectives of each proposed measure are briefly outlined in the Commission Communication 'Clean Energy for all Europeans', COM (2016) 860 final.
21. COM (2016) 860 final.
22. <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans>.
23. In December 2018, the revised renewable energy directive 2018/2001/EU entered into force, as part of the Clean energy for all Europeans package, aimed at keeping the EU a global leader in renewables and, more broadly, helping the EU to meet its emissions reduction commitments under the Paris Agreement. The recast RED changes perspective and only sets an EU-wide target of 32% without any binding national targets.
24. Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and social committee and the Committee of the regions, REPowerEU Plan, COM/2022/230 final.
25. Proposal for a Regulation of the European Parliament and of the Council amending Regulations (EU) 2019/943 and (EU) 2019/942 as well as Directives (EU) 2018/2001 and (EU) 2019/944 to improve the Union's electricity market design, COM/2023/148 final.
26. <https://ec.europa.eu/info/news/clean-energy-all-europeans-package-completed-good-consumers-good-growth-and-jobs-and-good-planet-2019-may-22_en>.

produce, store or sell their own energy, and strengthen consumer rights with more transparency on bills, and greater choice flexibility.[27]

The market design as established by Directive 2019/944[28] enables consumers' participation in all forms of demand response[29] and allows them to adjust their consumption according to real time price signals that reflect the value and cost of electricity or transportation in different time periods. With demand response, consumers can manage their consumption by using smart meters and thus using energy when the price is lower or selling energy when the price is higher.[30] Directive 2019/944 reinforced so far existing energy consumer rights, but it also introduced new consumer rights.[31] It laid down rules ensuring that consumers are able to freely choose suppliers (Article 4) as well as change suppliers (Article 12) or aggregators (Article 13). Basic contractual rights were renewed in Article 10. Consumers were entitled to a dynamic price contract (Article 11) that is an electricity supply contract between a supplier and a final customer that reflects the price at the spot market. Article 14 gives consumers access, free of charge to at least one certified price comparison tool and reinstates the obligation to provide consumers with frequent billing and billing information, which is correct, clear, concise and presented in a manner that facilitates comparison (Article 18). Consumers can engage in demand response (Article 17), self-generation and self-consumption (Article 15 (b)). Moreover, Article 19 entitles every consumer to request a smart meter equipped with a minimum set of functionalities. Article 16 defines a framework for local energy communities which may engage in local energy generation, distribution, aggregation, storage, supply or energy efficiency services. The Directive also provided clarifications to pre-existing provisions on smart meters, single points of contacts, and rights to out-of-court settlement (Article 26), universal service and vulnerable consumers.

Moreover, the revised Renewable Directive laid down the first EU legislation that aims to facilitate the involvement of household consumers in the deployment of renewable energy. The new Directive facilitated self-consumers of renewables and their joint collectives. Even though self-consumers (prosumers) were already recognised in certain national renewable energy policies, they are addressed for the first time in EU law together with 'renewable energy communities'. Final consumers are now explicitly recognised (Article 2 and Article 21) to be able to generate, store and consumer renewable energy and excess production and participate in the applicable support scheme, without losing their consumer rights and obligations as

27. Commission communication, Clean Energy for All Europeans, COM.2016.860 final.
28. Directive (EU) 2019/944 of the European Parliament and the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (recast).
29. Demand side response (DSR) is a voluntary reduction in electricity consumption taken from the grid by retail customers to react to an increase in the power price, or to some form of incentive payment.
30. Upon receiving a scarcity message, in particular a very high day-ahead price at a specified hour, they can decrease their consumption at that hour by disconnecting specific appliances, or use distributed generation equipment and/or rely on storage capabilities. To incentivise demand response, energy prices should vary between peak and off-peak periods according to supply and demand ('dynamic pricing'). CERRE Report, C Crampes, C Waddams, (2009) *Empowering Electricity Consumers in Retail and Wholesale Markets* (CERRE 2019) 23.
31. For the development of energy consumer rights see KJ Cseres, 'The Active Energy Consumer in EU Law' (2018) 9(2) European Journal of Risk Regulation 227-244.