



Data sharing: a new source for the Energy Transition

DOUWE LYCKLAMA & MAARTEN BAKKER

23 September 2019



Although almost imperceptibly, the number of data transactions is growing exponentially, meaning data stakeholders – consumers, businesses and institutions – have an obvious growing need for more control of their data. At the same time, our energy system has reached a crossroads in terms of its digital future, not least due to the introduction of GDPR, the Climate Agreement and the updating of the Energy Act following the implementation of the [Energy Directive](#) as part of the [Clean Energy Package](#) .

The topic of ‘energy data sharing schemes (or frameworks)’ therefore features prominently on the agendas of various stakeholders in the energy sector. Unlike commercial platforms such as Facebook and Google, an energy data sharing scheme gives stakeholders control of data sharing at the source (e.g. registers of grid operators, suppliers or IoT players). This is similar to the way in which data is shared in the fintech sector through schemes such as iDEAL, IDIN and e-Herkenning (‘e-Recognition’) in The Netherlands, Maestro across Europe, and [iSHARE](#) in the logistics sector. What is more, the concept of an energy data sharing scheme is entirely consistent with the recently formulated Dutch government vision on [data sharing](#).

Who can access which data and for what purpose?

The energy sector is already familiar with the phenomenon of data sharing, e.g. in supplier switching and requests for meter data. But these agreements are not futureproof. The growth in the number of data transactions is causing a sharp increase in demand for data sharing, driven partly by the

need to shape the Energy Transition. New market players are emerging who need access to data for various purposes, and new data sources are appearing all the time – both within and outside the sector. New assets are constantly impacting the energy system (such as batteries, electric cars, charging stations, solar panels, thermostats and private energy management systems). Active management of these data transactions is urgently needed, not only to maintain system stability but also to sustain the EU energy market’s competitive position and to support efficient grid planning and operations.

In short, data sharing is becoming crucial for both regulated and unregulated tasks. The traditional ‘in front of and behind the meter’ debate is turning into a more generic discussion about access to data: who can access what data under what conditions. These are precisely the complex issues that an energy data sharing scheme can solve.

One single Energy Data Sharing Scheme or Framework for the whole sector

An 'all-parties' energy data sharing scheme provides a framework within which DSOs, TSOs, suppliers, producers and other parties involved all agree with each other who will have access to which data and how standardised exchanges of data will take place on a level playing field.

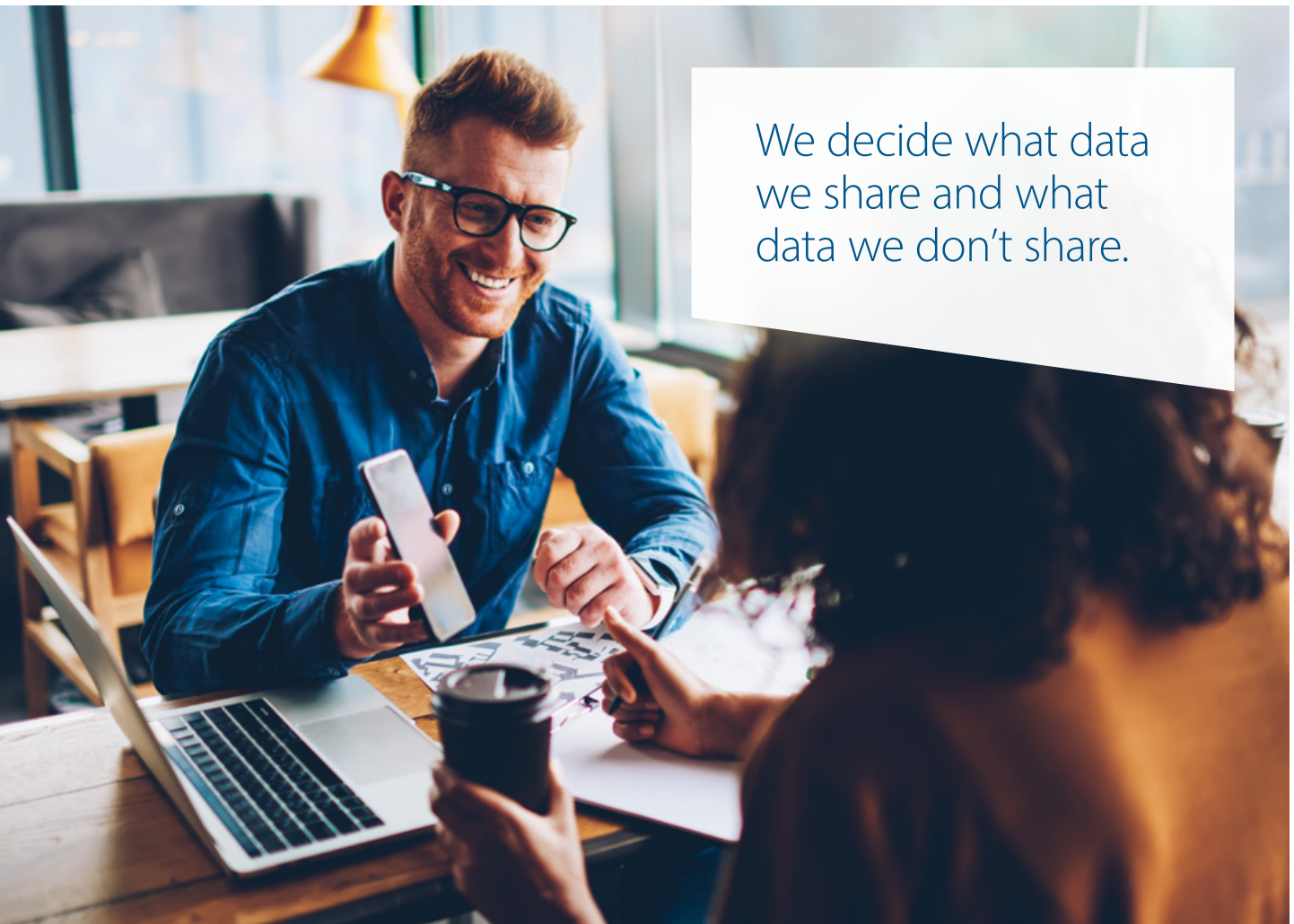
Additionally, they agree on ways to maintain the consumer's central position, futureproof consumer control of data and customer journeys. They also take joint cybersecurity measures. These agreements can be made technology-agnostic with no – or very little – new IT (legacy) being used in the core system.

The above-mentioned parties then implement the agreements on a decentralised basis in their own IT systems, processes and organisation. They comply legally with the agreements by means of a (multilateral) contract with a management organisation.

A new basis

The establishment of such an energy data sharing scheme requires a new mindset towards data exchange in the energy sector. Whereas the data sharing governance is currently based primarily on legally described roles and activities, a rigid legislative framework is no longer an appropriate basis for a fast-developing digital world. In the digital domain in particular, new roles are being devised all the time. These roles cannot – and should not have to – be specified in the law in advance. Futureproof governance and its proper implementation must therefore be guaranteed by a non-commercial management organisation.

One of the success factors is a clear distinction between 'how' and 'what'. The energy data sharing scheme focuses on the 'how'. The 'how' is recorded in a coherent set of standard agreements ('scheme') on matters such as governance, identification, authentication and authorisation (IAA), the cost model, functionality, technology, operation and legal aspects. The agreements apply to every party aiming to share data within or with the energy sector.



We decide what data we share and what data we don't share.



Support and inspiration

The development and management of the energy data sharing scheme should primarily be a matter for the parties in the energy sector themselves. To develop a relevant scheme and create a level playing field, it is important that parties with a thorough knowledge of the energy sector develop and take on the governance of the scheme on a joint (i.e. co-creation) basis.

This level playing field will gradually bring new parties to the table. A clear model must also be defined for escalation to the regulating authority and the policymakers to resolve any impasses in the future.

Ultimately the energy data sharing scheme could also work in collaboration with other sectors and should support cross-sectoral use cases. That is essential for the implementation of the Climate Agreement. Examples include data exchange between the energy sector and the financial sector for the purpose of mortgage loans to increase the sustainability of residential property, or between the energy sector and mobility sector aimed at pricing transport for EV loading based on overcapacity or undercapacity on the grid.

[Douwe Lycklama](#)

Douwe is a Founding Partner of INNOPAY, a consultancy firm specialising in digital transactions, and an expert in the field of digital identity, data sharing, open banking, payments and digital CSR.

The energy sector can fit in seamlessly in data sharing coalitions, such as the one [recently announced](#) by the Dutch Ministry of Economic Affairs and Climate Policy for example.

A new direction

[INNOPAY](#) has 20 years of experience with developing such schemes or frameworks all over the world and in a wide range of sectors. We are looking positively and with a great deal of interest at the way in which the energy sector is outlining the initial shape of an energy data scheme. The parties that are currently contributing will have the task of developing it further. Trust in the process and in each other's intentions is very important for this new way of working, and policymakers have a key role to play. It is important not to define the roles too tightly and to provide the necessary scope and direction in the new Energy Act.

An energy data sharing scheme presents a unique opportunity to move in a new direction and take back control of 'the winner takes most' digital champions – an opportunity to enable the urgently needed Energy Transition in the decades ahead and build an inclusive digital economy. Now is the time to seize it.

[Maarten Bakker](#)

Maarten is Director and Strategy Advisor at INNOPAY and an expert in value creation using open data, data-driven business models and network solutions.



World Trade Center F-tower
Strawinskylaan 381
1077 XX AMSTERDAM
The Netherlands
T: +31 20 65 80 651

Taunustor 1
(TaunusTurm)
60310 Frankfurt a.M.
Germany
T: +49 (0) 69 50 50 60 4350

info@innopay.com
www.innopay.com

About INNOPAY

INNOPAY is an international consultancy firm specialised in digital transactions. We help companies anywhere in the world to harness the full potential of the digital transactions era.

We do this by delivering strategy, product development and implementation support in the domain of Digital Identity, Data Sharing, Open Banking, Payments and Digital CSR. Our services capture the entire strategic and operational spectrum of our client's business, the technology they deploy, and the way they respond to local and international regulations.

We have grown from strength to strength since our foundation in 2002 and operate from our offices in Amsterdam, Frankfurt and Berlin. Our head office is located in The Netherlands, where we have the #1 market position.

We are a founding member of Holland FinTech, a financial technology hub with links to the rest of Europe, the US, the Middle East and Asia. Our team consists of over 60 experienced domain experts who regularly advise a wide range of global organisations.