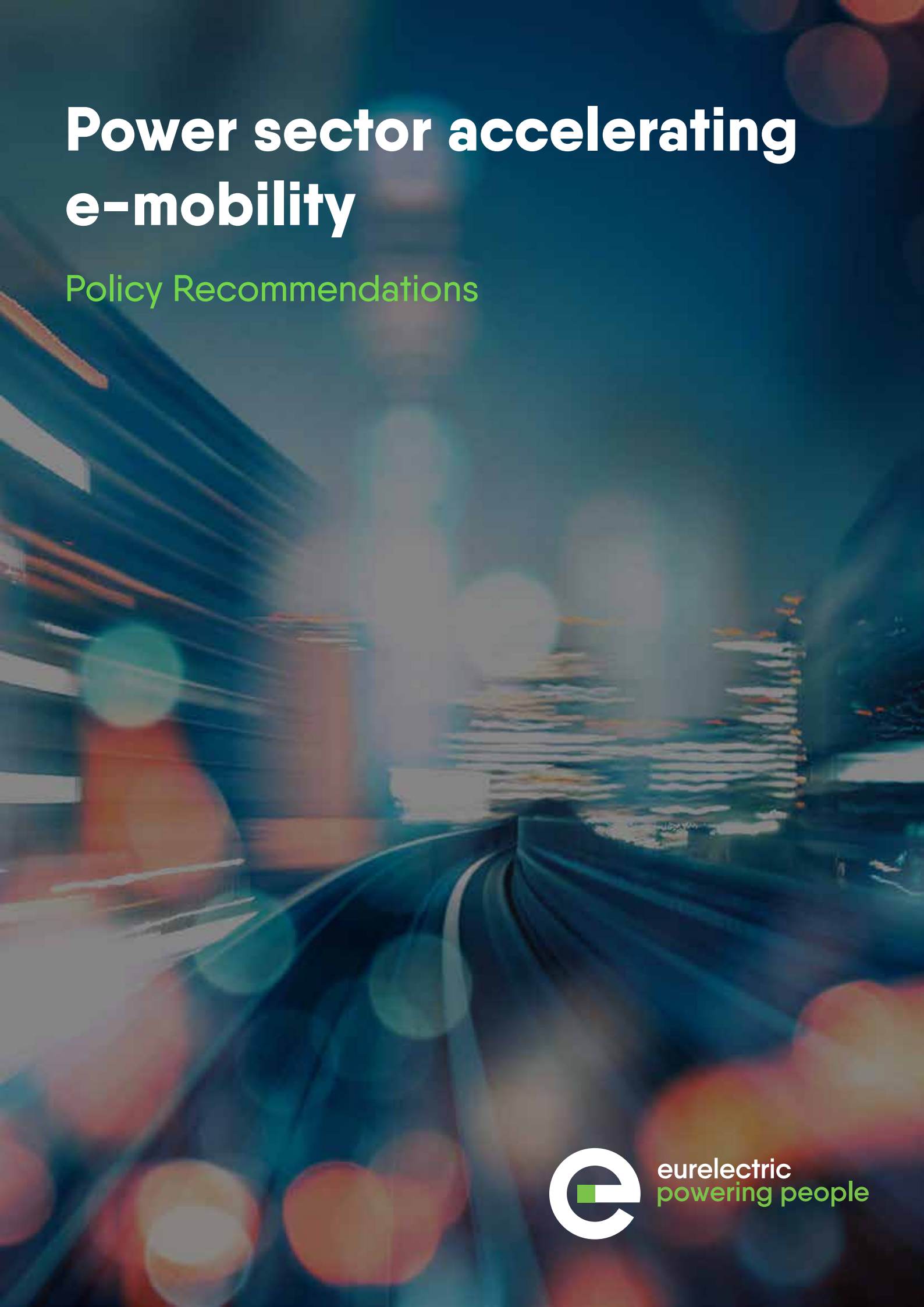
Power sector accelerating e-mobility

Policy Recommendations



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Who is **Eurelectric?**

Eurelectric is the federation for the European electricity industry. We represent the power sector in over 32 European countries, speaking for more than 3,500 companies in power generation,

We contribute to the competitiveness of our industry, provide effective representation in public affairs and promote the role electricity in addressing the challenges of sustainable development.

We draw on more than 1000 industry experts to ensure that our policy positions and opinions reflect the most recent developments in the sector. This structure of expertise ensures that Eurelectric's publications are based on high-quality input with up-to-date.

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1. Sustain clear emission reduction targets

All signs confirm the direction of travel. E-mobility is taking off faster than even the most ambitious forecasts predicted. But we are not done yet. To be truly transformational, and deliver the sought after environmental and driver benefits, we need to go faster still. For Europe to become carbon neutral by 2050, road transport needs to be decarbonised before then.

For this, Eurelectric fully supports the newly proposed emission reduction targets for cars and vans, aiming at 2035 for the phase-out of the internal combustion engine (ICE).

To sustain these higher ambitions, Eurelectric suggests establishing a clear linear path for CO2 reductions between 2025 and 2035 allowing for a long-term emission reduction trajectory that ensures sufficient visibility for industry.

Eurelectric calls on policymakers to maintain a similar level of ambition in the forthcoming proposals for:

- more stringent air pollutant emissions reductions for all vehicles and
- CO2 emissions targets for heavy-duty vehicles.

Moreover, targets should be considered to boost the uptake of zero-emission vehicles in corporate and urban fleets.

2. Enhance Europe's public and private infrastructure

As the number of EVs on the road meets and exceeds targets, the deployment of charging infrastructure needs to keep pace. To reach the number of chargers estimated necessary by the report (13 million by 2025, 34 million by 2030, and 65 million by 2035), recently proposed minimum binding targets for public charging infrastructure deployment, based on the size of the EV fleet, will prove crucial.

Nonetheless, a higher ambition than that of the current Alternative Fuels Infrastructure Regulation (AFIR) proposal is needed to kickstart national investment in the charging network and bring it to where it needs to be to support mass EV adoption.

Notwithstanding the positive signals given by a European public-charger network that expanded by 36% in 2021 compared to 2020, multiple hurdles obstruct infrastructure rollout, impede the user experience, and slow EV adoption.

Moreover, as 29 million chargers in 2030 and 56 million in 2035 will be residential chargers, ambitious minimum requirements to make all European buildings EV-ready will be essential.

Local authorities should be empowered to address long permitting delays, simplify administrative procedures, and accelerate the installation of public and private charging infrastructure.

3. Support the development and deployment of smart solutions

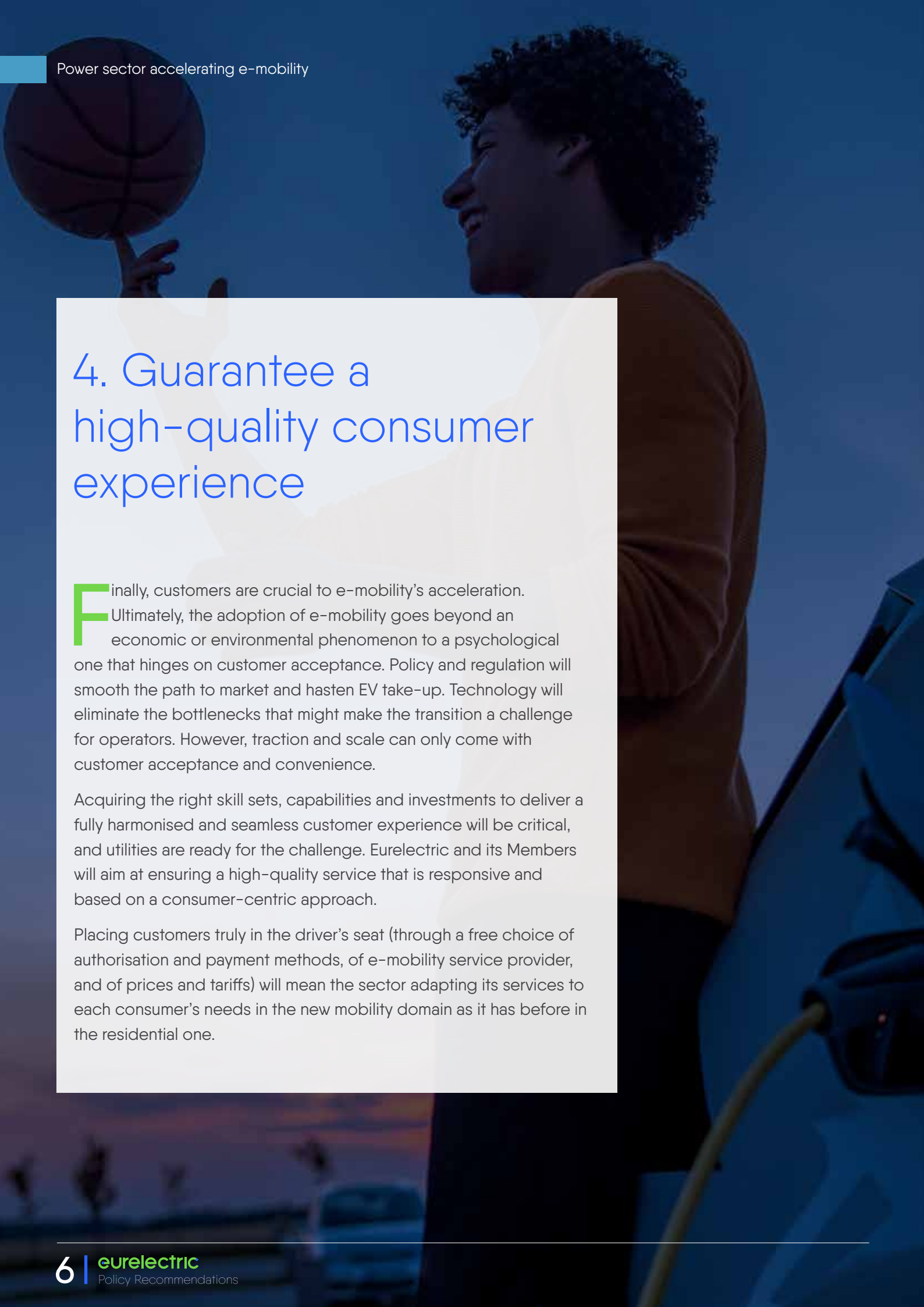
EV penetration will see electricity demand grow by 11% per year, exacerbating the risk of congestion. Fortunately, smart and flexible solutions already exist and will be able to mitigate this risk. Managed charging, either via supplier-managed smart charging or a user-managed response to time-of-use tariffs, will allow for load shifting, dampening the spike in peak load by up to 21% (compared to unmanaged charging).

Additionally, smart meters and grids will increase monitoring capabilities and therefore contribute to a more accurate understanding of where grid modernisation investments are needed or can be avoided. Hence, accelerating the deployment of smart charging capabilities for newly built public and private chargers remain fundamental.

Moreover, energy storage systems provided by EVs and stationary batteries could provide valuable balancing services, reducing charging operations' dependency on local grids. In recognising this role, the double taxation of electricity storage should be avoided.

Finally, a forward-looking regulatory framework for DSOs that encourages adequate investment is needed, one that recognises their key role in the deployment and integration of EV charging infrastructure.

If done properly EVs can play a big part in improving grid stability by providing flexibility services such as load balancing, peak shaving, regulation of frequency, and support for the incorporation of renewable energy.



4. Guarantee a high-quality consumer experience

Finally, customers are crucial to e-mobility's acceleration. Ultimately, the adoption of e-mobility goes beyond an economic or environmental phenomenon to a psychological one that hinges on customer acceptance. Policy and regulation will smooth the path to market and hasten EV take-up. Technology will eliminate the bottlenecks that might make the transition a challenge for operators. However, traction and scale can only come with customer acceptance and convenience.

Acquiring the right skill sets, capabilities and investments to deliver a fully harmonised and seamless customer experience will be critical, and utilities are ready for the challenge. Eurelectric and its Members will aim at ensuring a high-quality service that is responsive and based on a consumer-centric approach.

Placing customers truly in the driver's seat (through a free choice of authorisation and payment methods, of e-mobility service provider, and of prices and tariffs) will mean the sector adapting its services to each consumer's needs in the new mobility domain as it has before in the residential one.

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