Repeating History or Charting a Strategic Course for Distributional Energy Justice?
Navigating the Crossroads of Regulatory Governance in the Renewable and Distributed Energy Sectors

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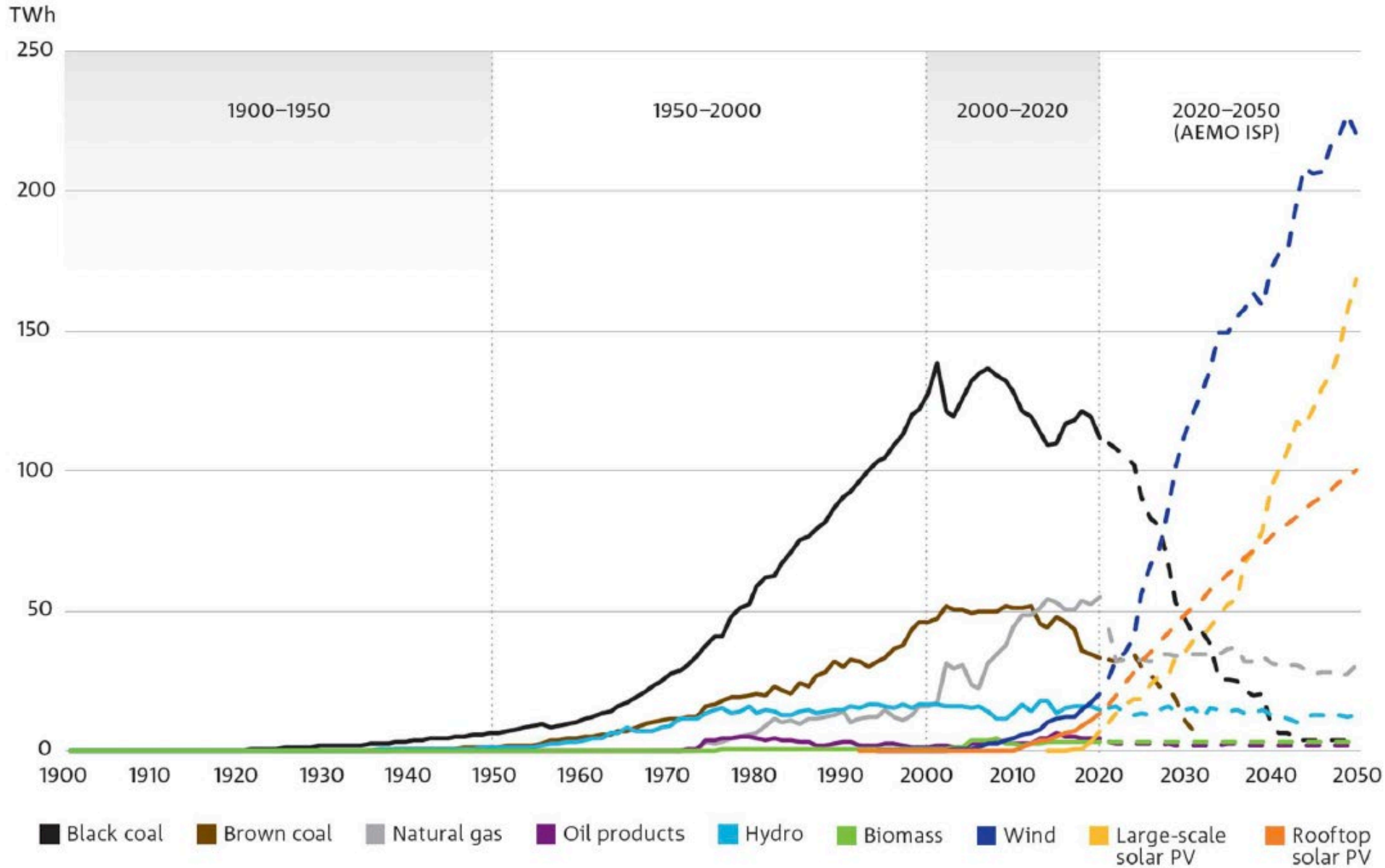
Figure 2-2 Australian electricity generation by fuel and technology 1900 to 2050



Today

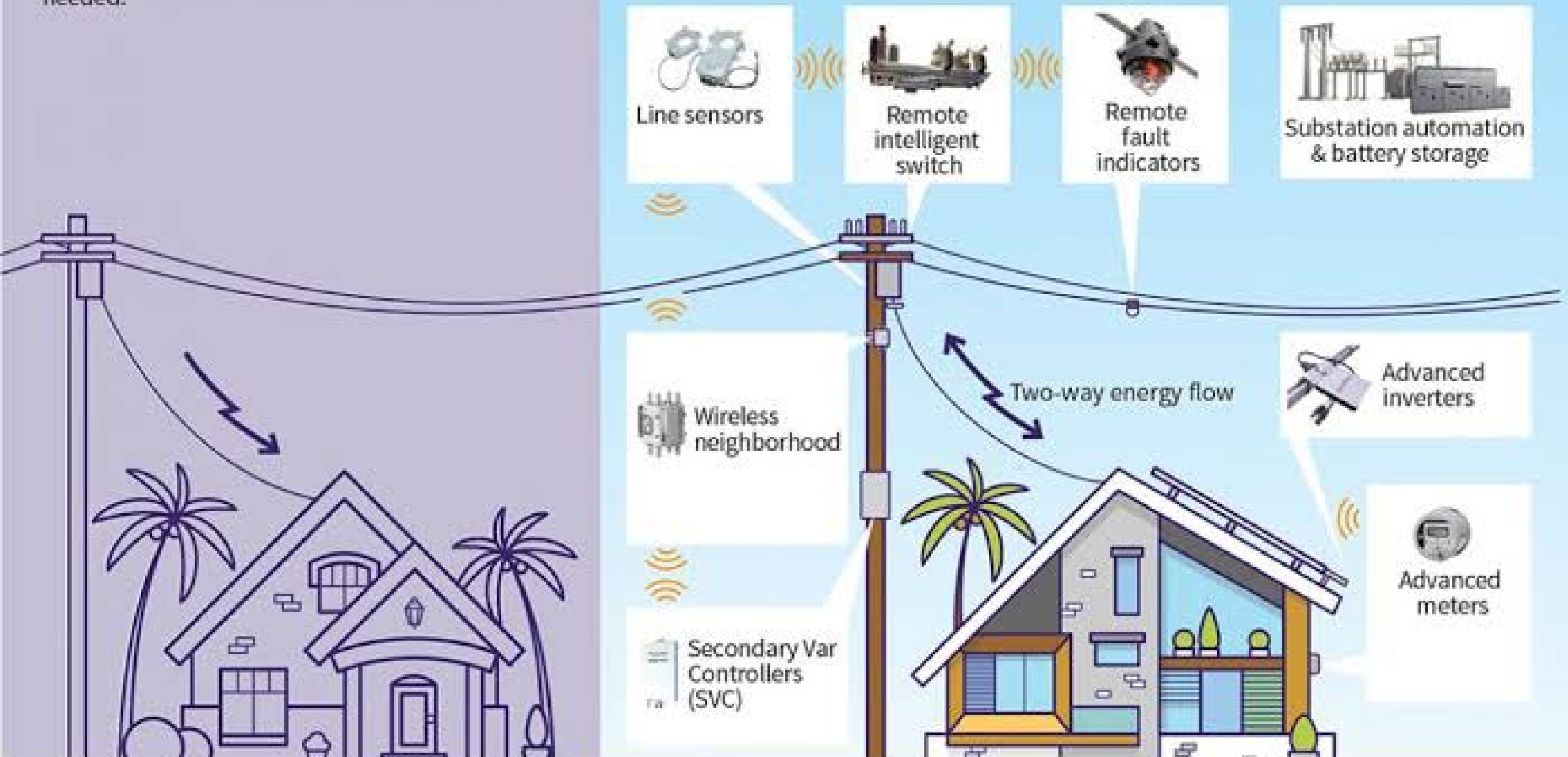
One-way energy flow

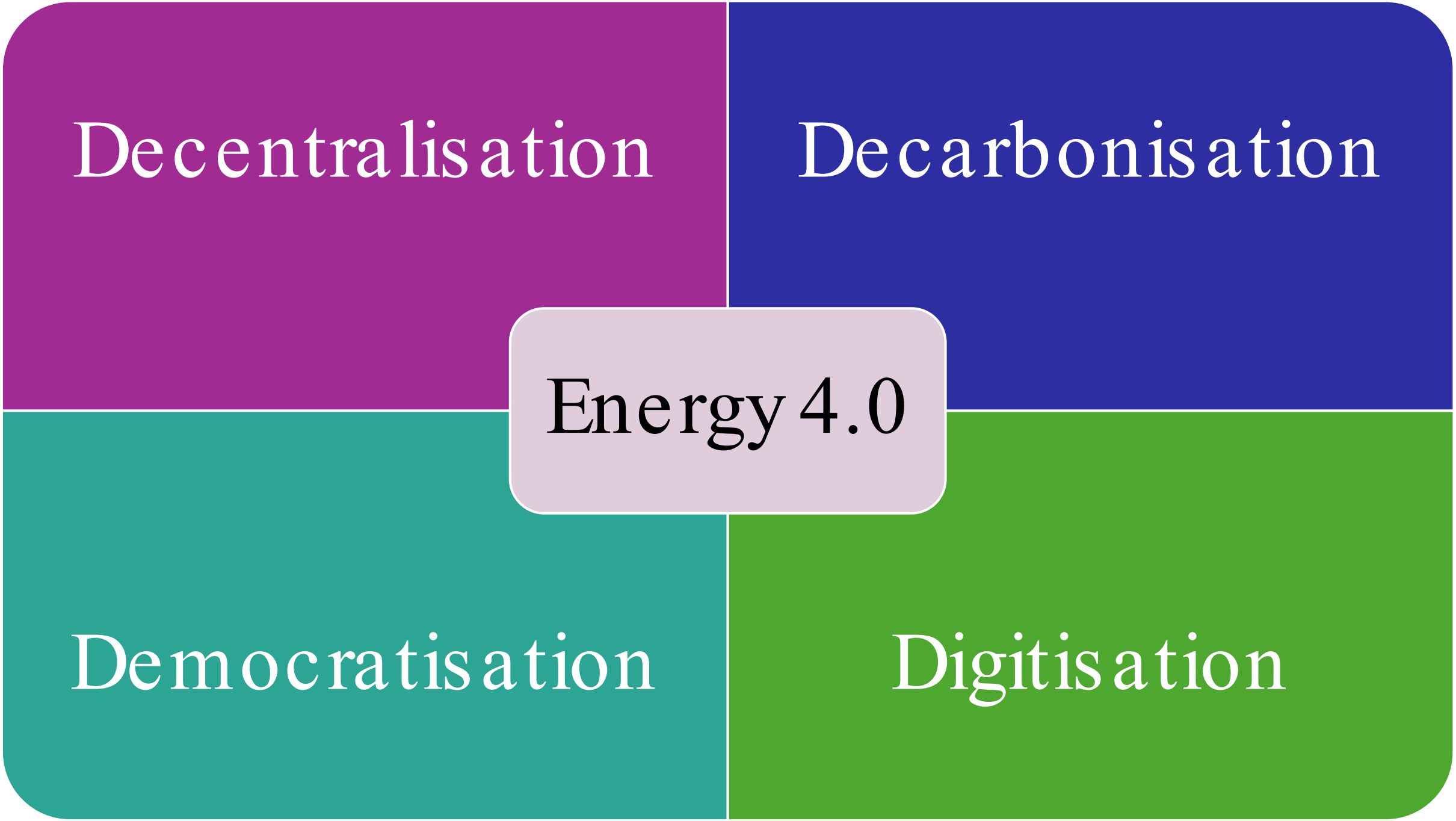
Power generated from a few central power plants supplied to all customers. Limited monitoring needed.

Tomorrow

Two-way energy flow

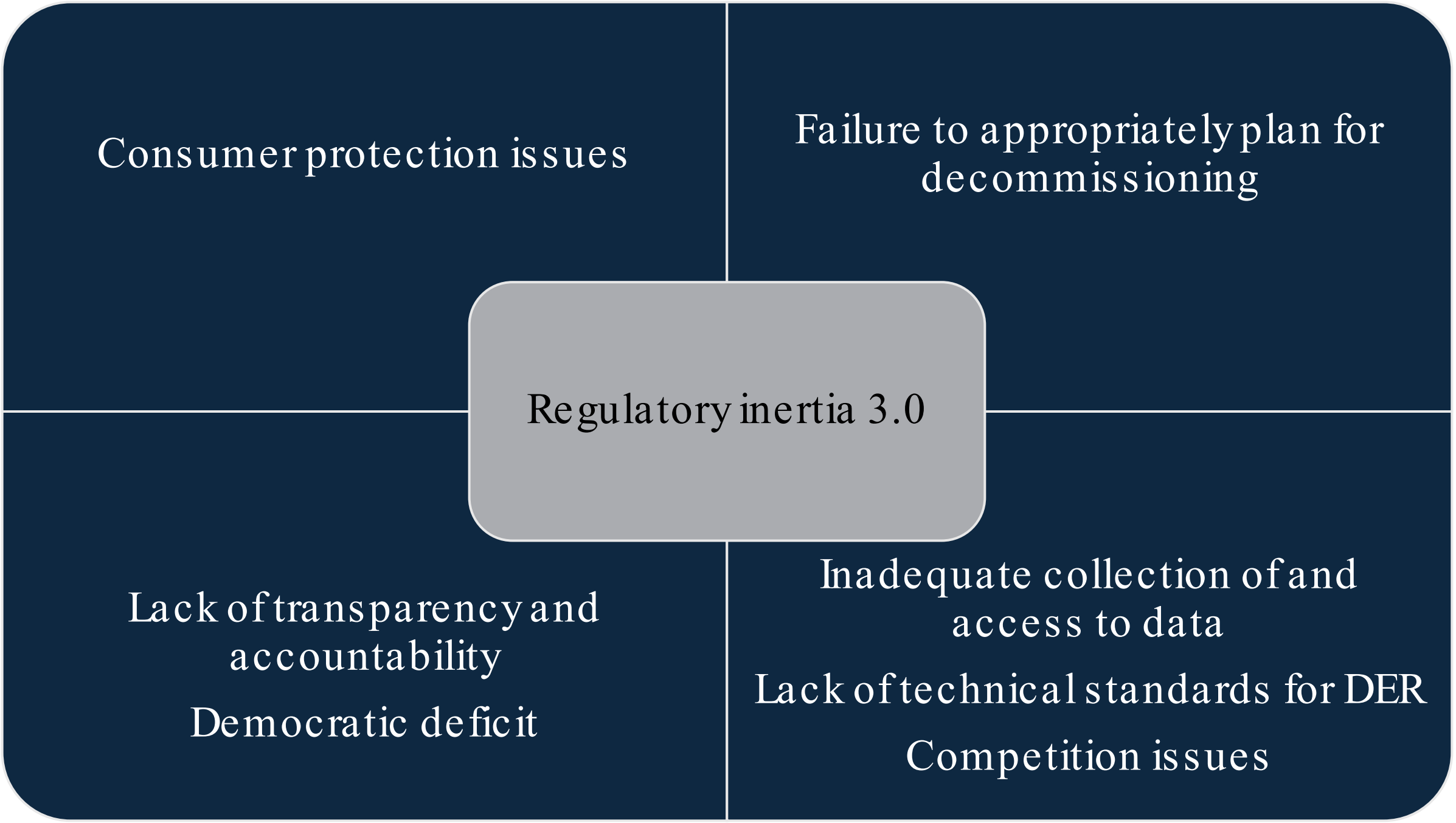
Customers' resources are an important part of the grid.
Reliability is critical as more and more customers provide resources to the grid.



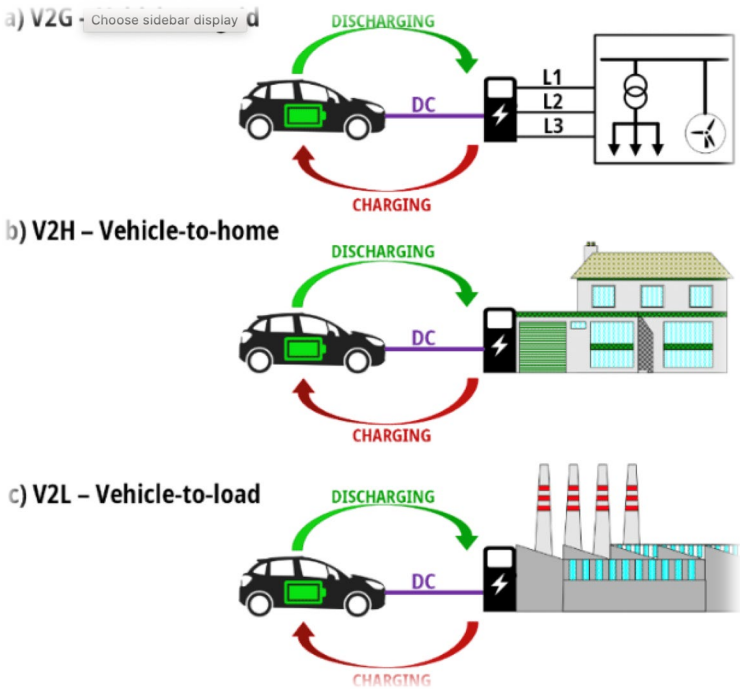

Decentralisation
Decarbonisation
Energy 4.0
Democratisation
Digitisation

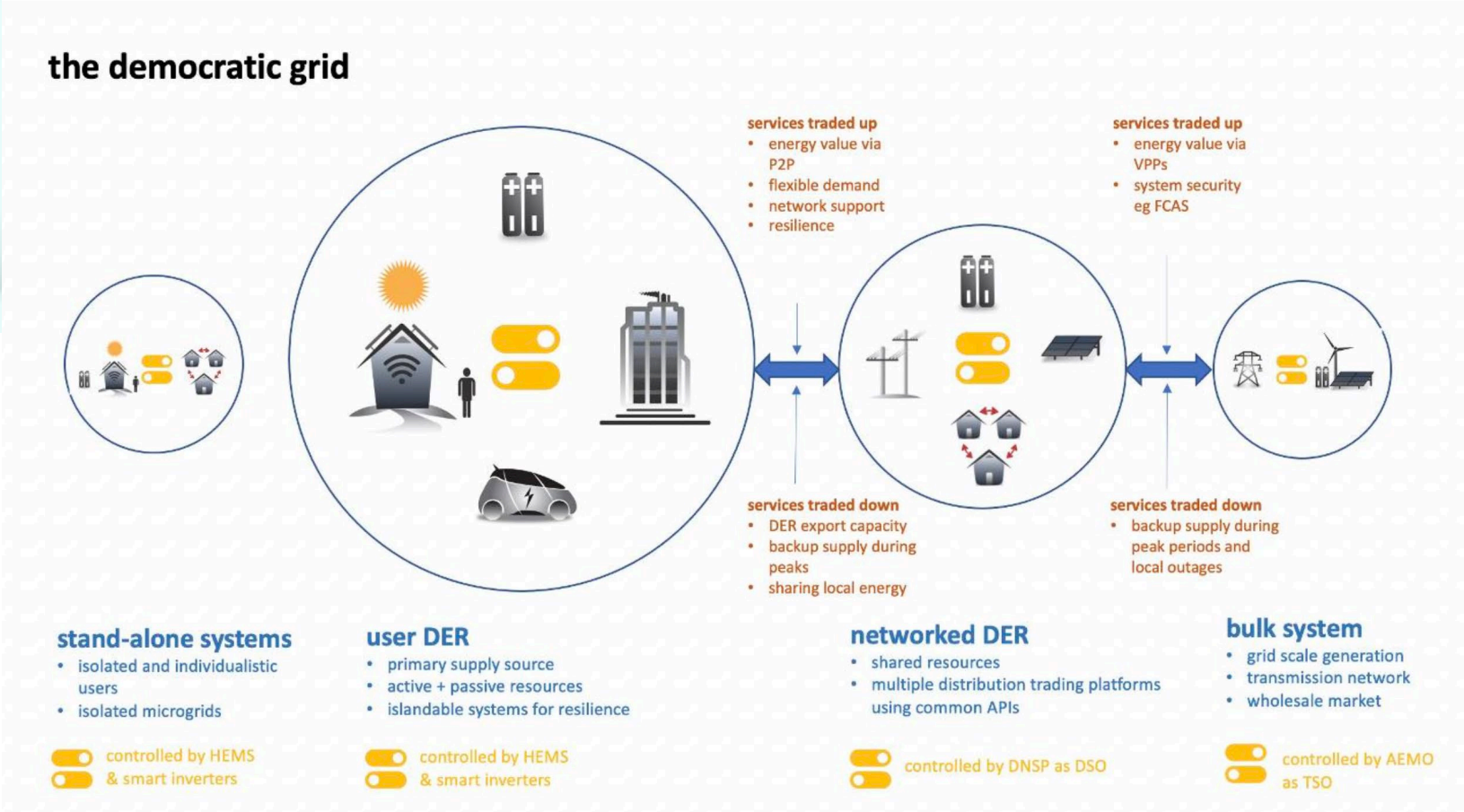
- Utilities globally invest approximately $710bn on energy assets every year.

- Bloomberg/NEF estimates that by 2030 the major source of investment in energy assets will come from consumers (in the form of PV, batteries, electric vehicles, community energy etc) $2,100bn.


Consumer protection issues
Failure to appropriately plan for decommissioning
Regulatory inertia 3.0
Lack of transparency and accountability
Democratic deficit
Inadequate collection of and access to data
Lack of technical standards for DER
Competition issues

Disruptive innovations in the sector





The biggest resistance to the energy transition is the resistance to changing our regulatory model.

Allocation of risks and liability

- Risk ought to be allocated to those parties best able to manage it

- The liability that prosumers are currently being exposed to is significant:
    - There is a lack of insurance products available
    - Poor understanding of the potential risks involved
    - Limited ability to be able to mitigate those risks

What we need to do:

Create a flexible and adaptive regulatory framework that meets the innovative needs of decentralised energy, while also recognising the importance of coordination and system security.

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