

Sharing Energy Data:

Siloed Ecosystem vs Common Good

A collaborative data sharing ecosystem will facilitate the provision of new energy services at a cheaper rate for businesses and citizens alike. This will accelerate the transition to Net Zero.

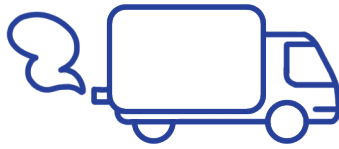
Consider two contrasting scenarios to understand the importance of data sharing:
Siloed Ecosystem vs Common Good



First, let's introduce our stakeholders:



A Distribution Network Operator (DNO) monitors the electricity distribution network in its region and holds key data on network capacity.



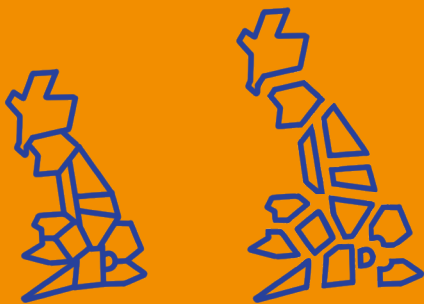
A Food Delivery Service operates a petrol-fueled vehicle fleet but wants to move to an EV fleet across the country.



An innovative Electric Vehicle (EV) charging point operator is looking for opportunities to invest in installing and operating new EV charge points nationally.

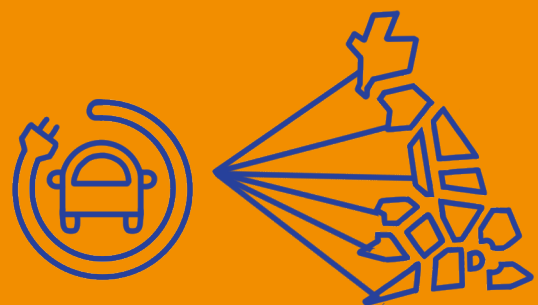
SCENARIO 1: SILOED ECOSYSTEM

1.



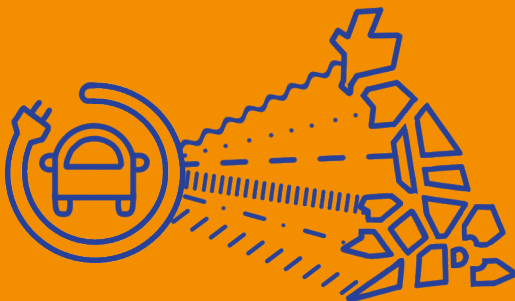
All DNOs share their data on network capacity but using their own internal standards.

2.



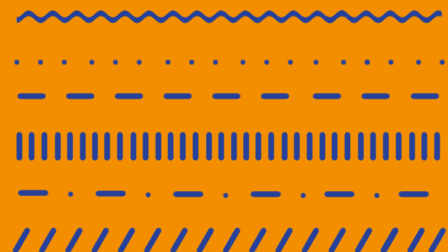
EV charging point operator asks DNOs for data on local network capacity to install their charging points.

3.



DNOs provide data in different formats and at different sampling frequencies.

4.



EV charging point operator is slowed by converting all data into the same format, delaying or preventing them from installing new charging points.

5.



Food Delivery Service does not purchase a fleet of EVs as there is no charging point infrastructure. They decide to keep their old petrol fleet.

6.

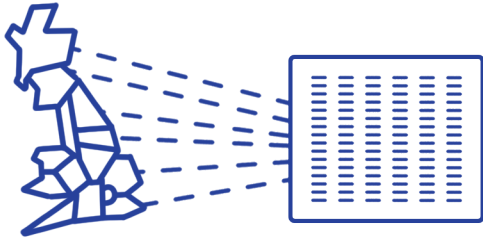


Lack of EV fleets impede local flexibility markets' development, resulting in higher electricity costs to both the DNOs and consumers.

Since all stakeholders work in their separate siloes, effective collaboration is impossible. This slows down the transition to Net Zero and causes an increase in prices of energy services.

SCENARIO 2: COMMON GOOD

1.



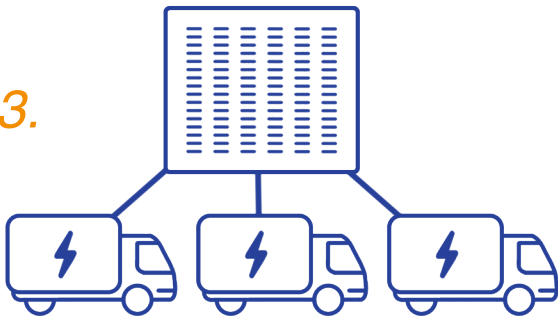
All DNOs share their data on network capacity and use common formatting and standards.

2.



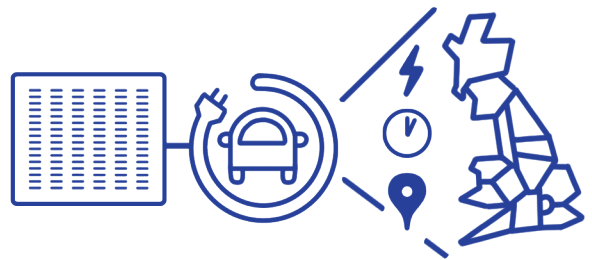
The EV charge point operator:
- can easily pull all data into a single location/database
- identifies the best location to install new charging points and best times to operate the charging points

3.



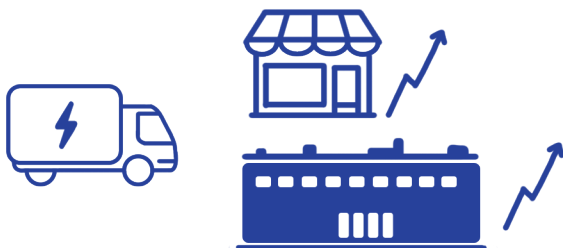
Food Delivery Service can use EV charge point operator's charge points so it:
- purchases a nationwide fleet of EVs
- publishes the fleet charging data on a common platform

4.



The EV charging point operator studies the charging point data and:
- proposes a new charging strategy for Food Delivery EV fleet
- uses the EV fleet to compete in flexibility markets, addressing DNOs congestion issues

5.



The Food Delivery Service uses the new strategy to get a cheaper charging rate and lower prices are passed to the customers.

6.



The DNO and its customers avoid network reinforcement costs through flexibility service.

By working together, the stakeholders achieved significant reductions in carbon emissions while saving money.

The “Common Good” scenario will be possible only if networks work collaboratively for whole system benefits, and all available energy system data is:

- ✓ Available in a standard format with common licences
- ✓ Available through simple and easy to access APIs
- ✓ Available from a set of easy to find open data platforms hosted by the networks
- ✓ Shared securely using current best practices

