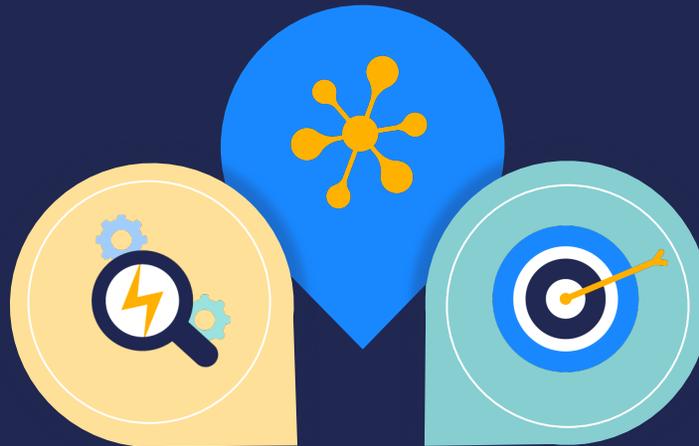




Tackling the grid edge

Turning behind the meter devices into
reliable grid resources



VISION

A carbon-free,
distributed energy
future

MISSION

Integrate any
customer or device
with the grid to
provide flexibility
and reliability

400GW



Partners



Connecting grid-edge to utility enterprise



Utilities



Build a large flexible resource



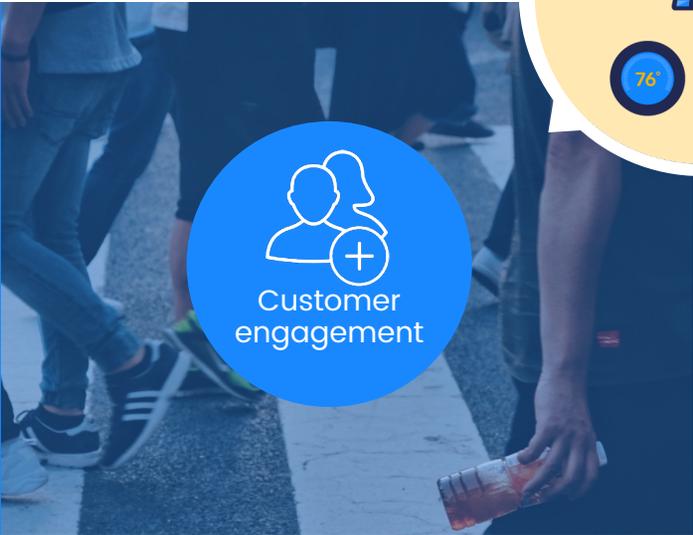
DER programs (DSM)



Network management

Ensure grid reliability in a distributed world

Keep the customer happy



Customer engagement



Market operations

Optimize margins by monetizing the stack

EnergyHub's 2021 in Review



Managed the
largest and
fastest-growing
multi-DER
portfolio



Grid services initiated
700 times



shifting
6,452 MWh
of total energy



Resulting in
850M device
minutes
of grid flexibility



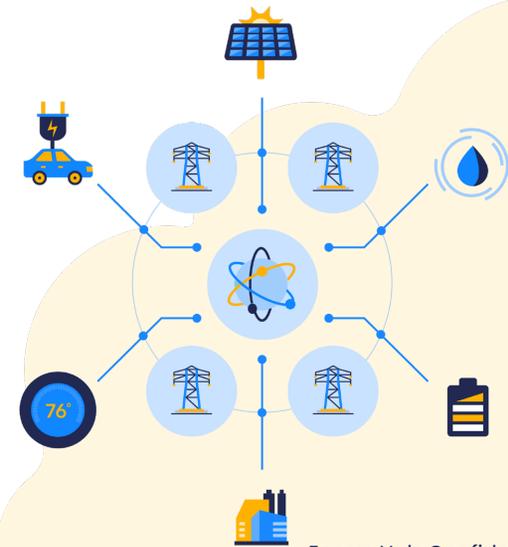
Working with over
60 utilities



to manage
700K+ DERs
(distributed energy resources)



2,900 MW
of load under management



EnergyHub Confidential

Grid-edge supports various services

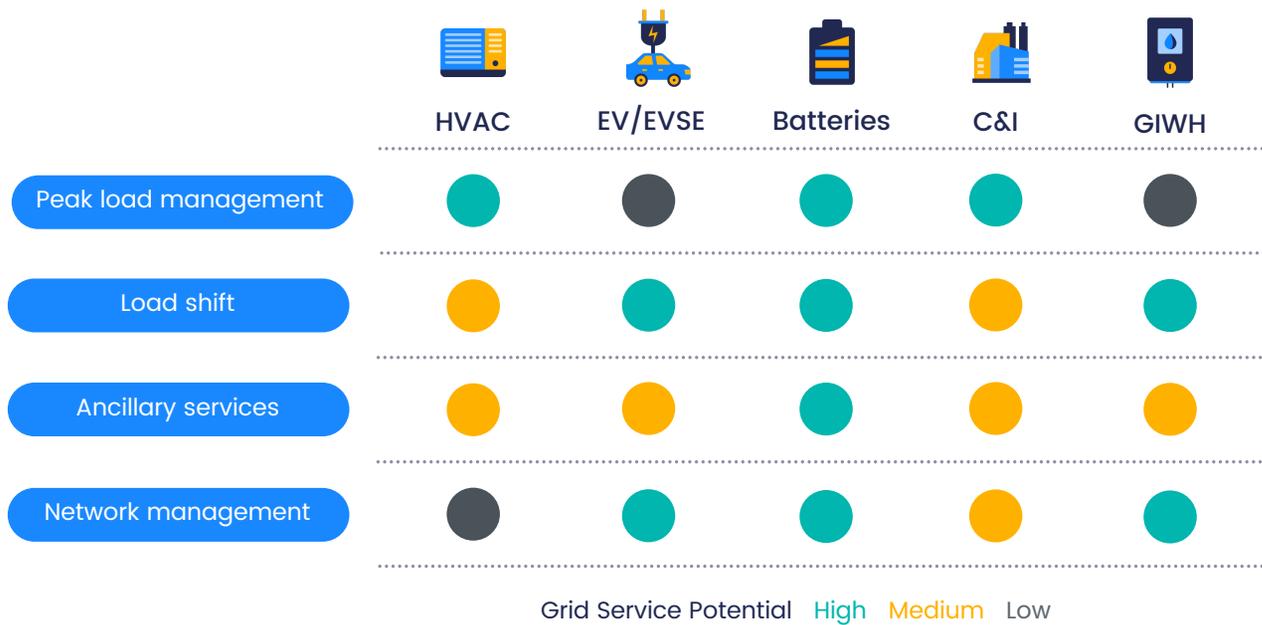
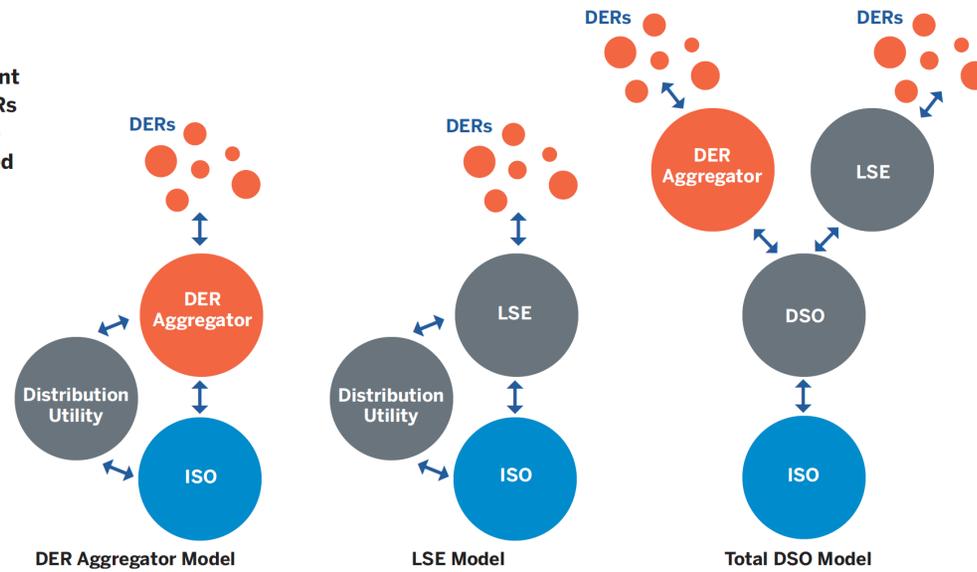


FIGURE ES-1

Three Structural Participation Models for DER Participation in Wholesale Markets

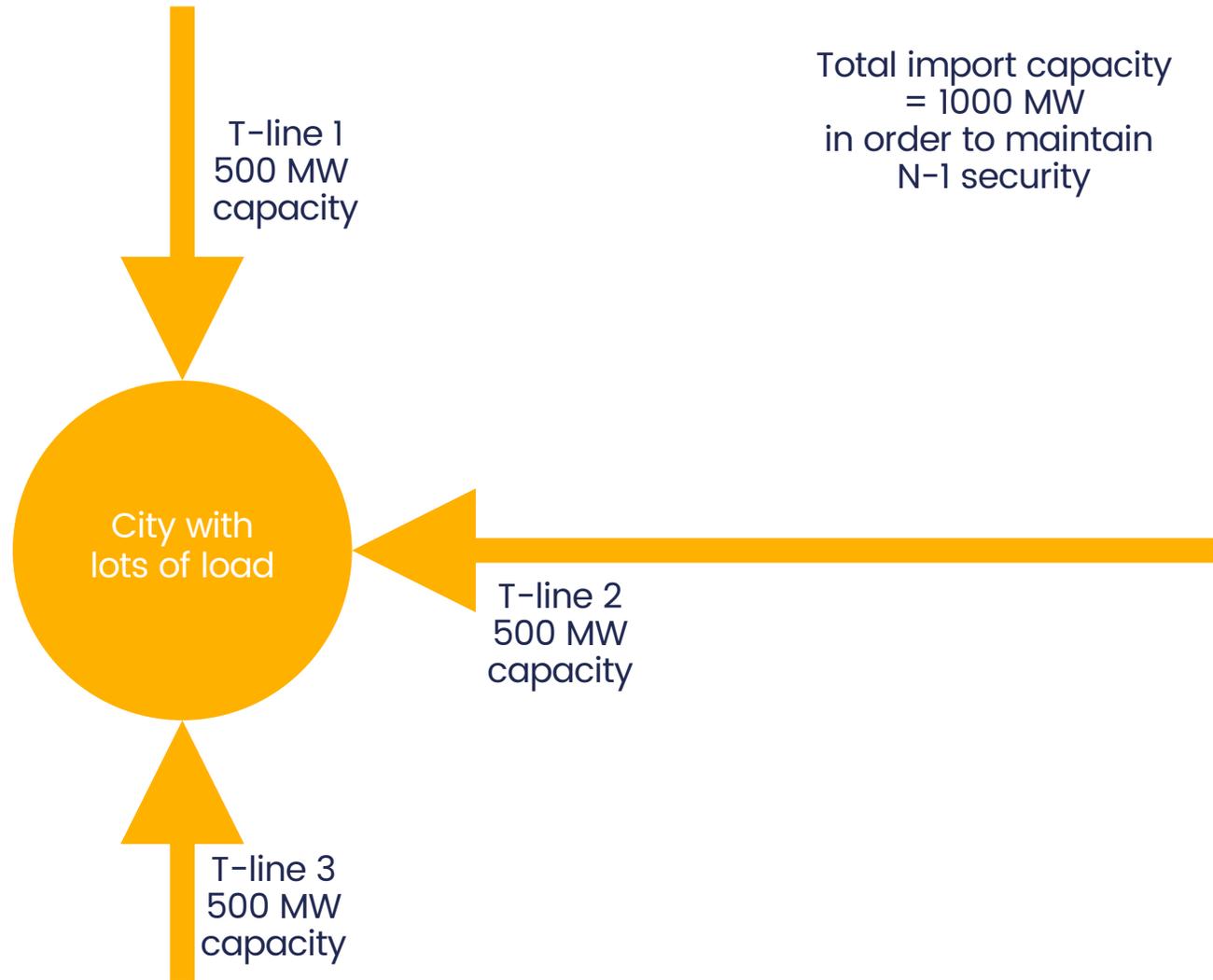
Structural participation models describe different approaches for how DERs participate in wholesale markets; they vary based on the nature of the interactions among the ISO, distribution utility, and DER aggregator.



Structural participation models describe different approaches for how DERs participate in wholesale markets; they vary based on the nature of the interactions among the ISO, distribution utility, and DER aggregator.

Note: DER = distributed energy resource; DSO = distribution system operator; ISO = independent system operator; LSE = load-serving entity. In the LSE model, the LSE and the utility may be the same entity.

Source: Energy Systems Integration Group.



Total import capacity
= 1000 MW
in order to maintain
N-1 security

