NSW Distribution System Plan Opportunities Report

This is a plan for how distribution networks can play a central role in the transformation of the NSW energy system.

By making use of the network we have today, distributors can de-risk the energy transition, buying time whilst essential transmission projects are developed.

The plan lays out a future where the distribution network is fully utilitised. This includes renewable energy zones on the high voltage distribution network, co-locating load and generation in new industrial precincts, and connecting significantly more storage at all levels of the distribution network.

It also includes coordination of consumer energy resources (CER), in particular electric vehicles, ensuring all customers can benefit from these investments.

For the first time, the three NSW electricity distribution businesses have come together to develop a single, unified view of how to unlock these opportunities.







Reduce pressure on household energy costs



De-risk the timely achievement of renewable energy targets



Improve social licence and address transition inequities



TRANSMISSION



Greater coordination of

CER and unlocking

mid-scale solar can

deliver up to

Community

50%

batteries support

outcomes for the

NSW households

without rooftop

solar in 2030

more equitable

Better utilisation of available capacity in the distribution network and optimising the value for and from consumer energy resources unlocks...



...up to **\$4.3bn** in economic benefits

MEDIUM & LOW-VOLTAGE DISTRIBUTION

11-33 kV



A DNSP-enabled rollout of EV charging infrastructure could accelerate uptake by

In front of meter

storage and CER

an opportunity to

defer zone

coordination create substation upgrades by up to 15 years

Distribution-connected generation can produce

SUB-

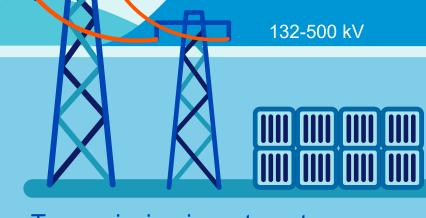
TRANSMISSION

33-132 kV

more than enough energy to power all NSW households ←

Distribution network augmentations (~\$3.2bn) will enable

20.6_{GW} of distribution-connected wind and solar by 2050 (~\$0.15m per MW)



Transmission investment is still needed, but distribution-connected generation buys

2-5 years



By 2050, distribution-connected wind and solar reduces gas-powered generation by 50 TWh

... displacing almost 4 years of NSW's current gas consumption

> ... and reduces reliance nsw demand by 65% ←



Unlocking this value requires



in benefits

Bottom-up integrated strategic planning



DISTRIBUTION

Reforming project approval pathways



Regulatory changes to facilitate distribution-connected storage



Click here to launch the NSW Distribution **System Plan Opportunities Report**

