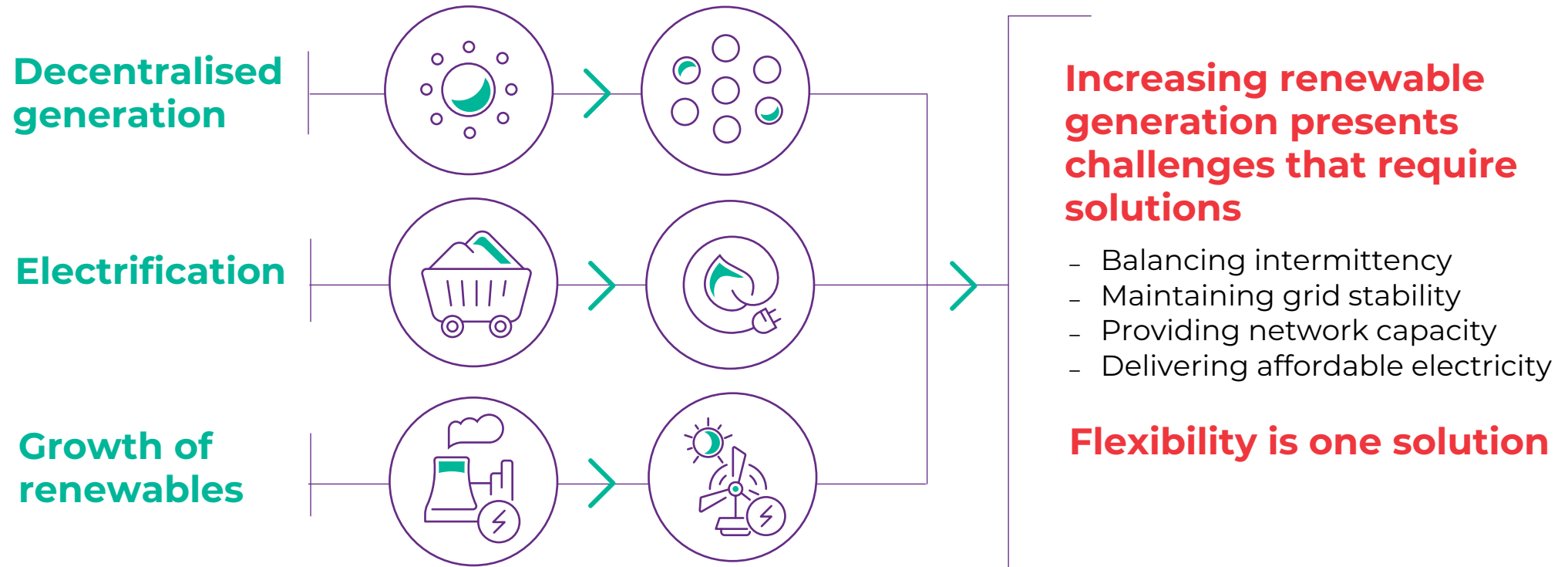


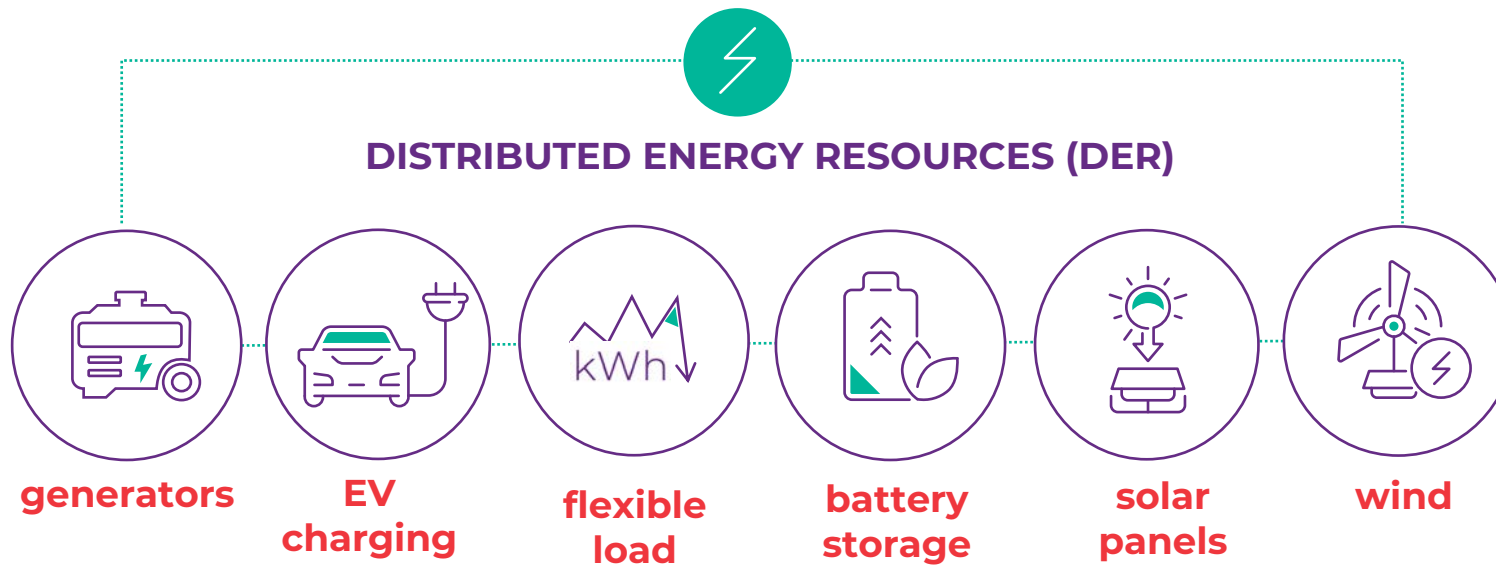
Unlocking the value in energy flexibility

The energy landscape is changing fast



Where can flexibility come from?

any small-scale, electricity supply or demand resources, that are interconnected to the electricity grid, that can be used either individually or in aggregate to provide value to the grid



Transpower estimates that DER will be worth ~\$1 billion annually by 2050

A Flexibility Plan 1.0



A starting point for coordinated, collaborative action

Simply Energy webinar | 22 September 2022

Today

- What we mean by flexibility and why it's important.
- FlexForum, its purpose, objectives and members.
- Flexibility Plan 1.0 – 5 categories of activities to unlock value.
- Next steps for FlexForum.
- How to get involved.

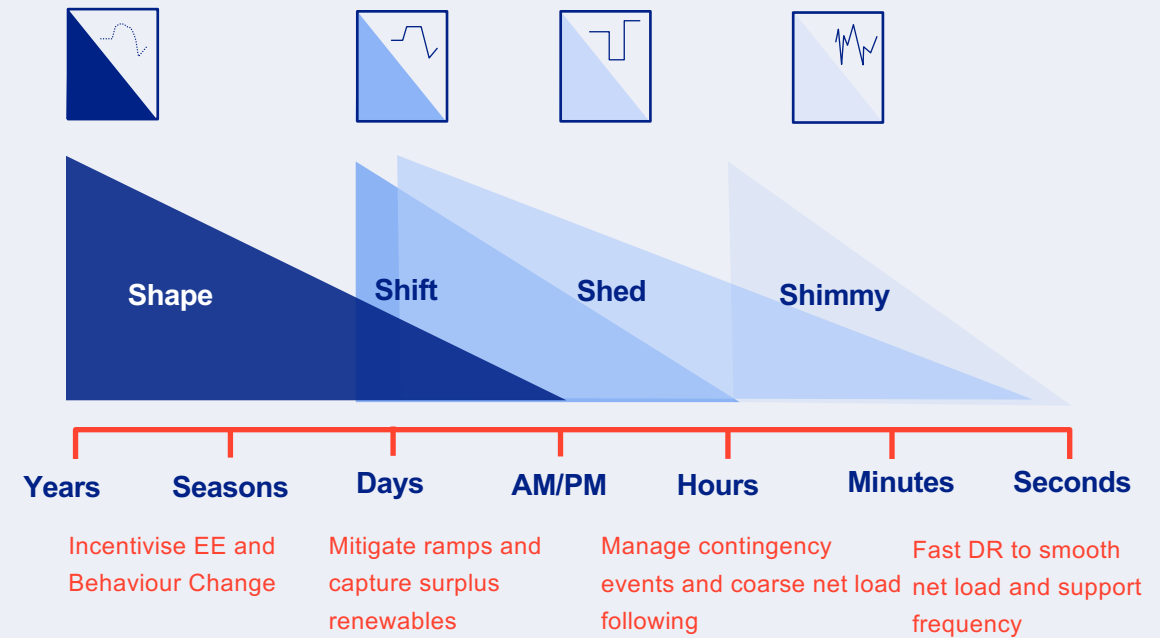
Flexibility

Flexibility is useful to households, communities and businesses, and for power system and market operation.

Modifying generation or consumption patterns in response to a signal, to achieve a desired outcome:

- Reduce energy-related capital costs.
- Reduce energy-related operational costs.
- Improve reliability and resilience
- Reduce emissions.
- Supply energy, network or ancillary services.

Distributed Energy Resources (**DER**) can be flexible



A starting point for coordinated, collaborative action

The FlexForum was formed to:

Identify practical, scalable and least-regret steps needed to enable households, businesses and communities to make choices which maximise the value of DER and flexibility.

Build a broad consensus across the electricity sector and others interests for the set of actions to integrate DER.

Build capacity and capability to implement the set of actions to integrate DER.

FlexForum

Fortnightly meetings held Feb-Aug 2022 focused on delivering Flexibility 1.0 Plan by end of August.

MEMBERS

OBSERVERS






FLEXIBILITY PLAN 1.0

To enable choices that maximise the value of DER and Flexibility

A set of steps

Deploying
practical
solutions that
we know
about

Defining and
testing new
ideas

Who takes the step

Scope,
approaches,
resources and
timeframe

Research &
development
support from
Ara Ake,
EECA, MBIE,
industry
partners, etc

How the actions will deliver outcomes

Coordination
through
ongoing
information
sharing &
pooling
resources

Collaboration
by actively
involving
interested
parties

Engagement
with broad
set of
stakeholders

5 categories of activities

Information and Education



Information & Data Steps

Technical Standards



Technical steps to ensure safe, reliable and efficient operation

Enabling Processes



Process steps to provide clear and simple pathways.

Regulatory Settings

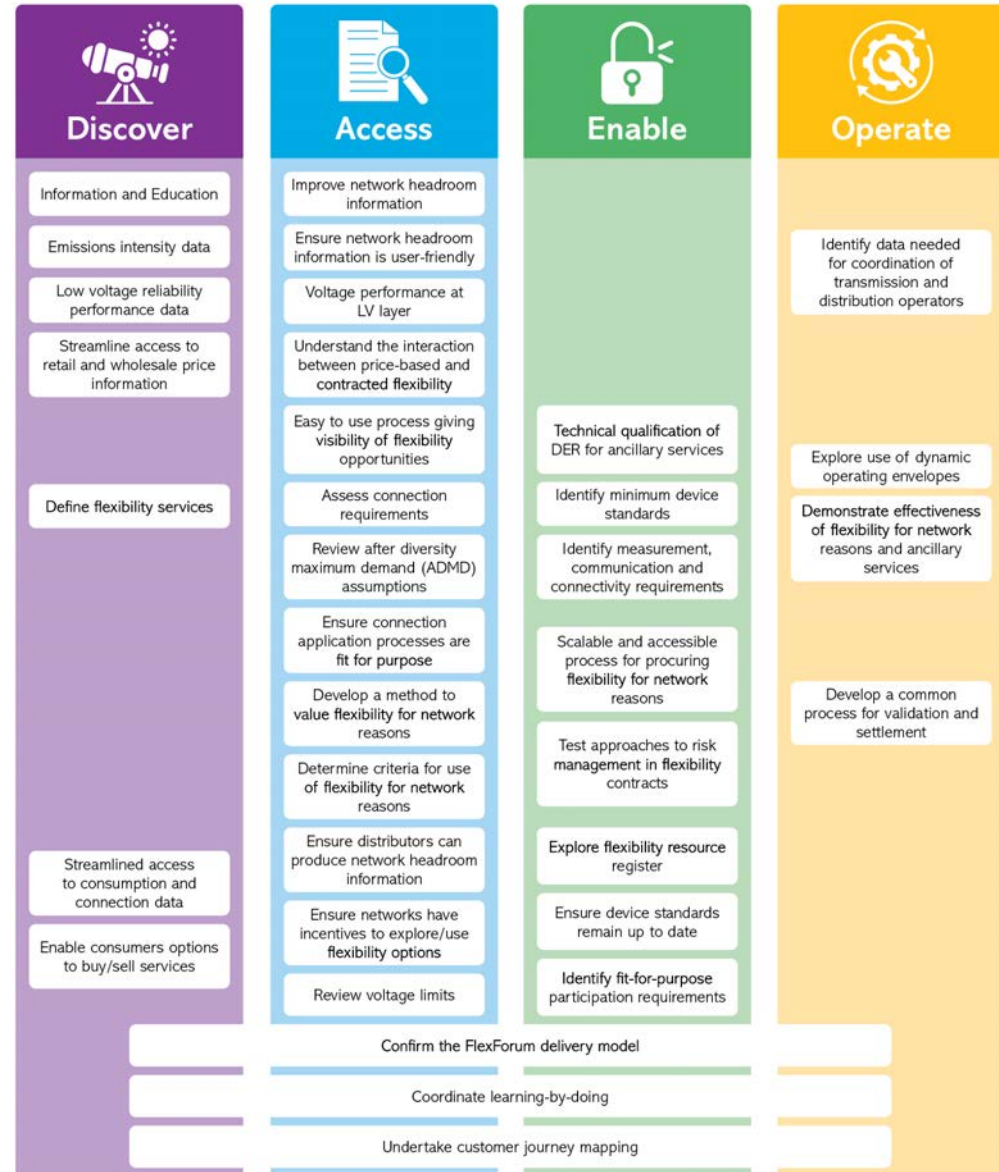


Regulatory steps to remove or avoid barriers.

Coordination and collaboration



Overarching steps for delivering the flexibility plan.



How to get involved



Share

- > your experience, plans or progress.
- > the questions you want to work on.

Email us

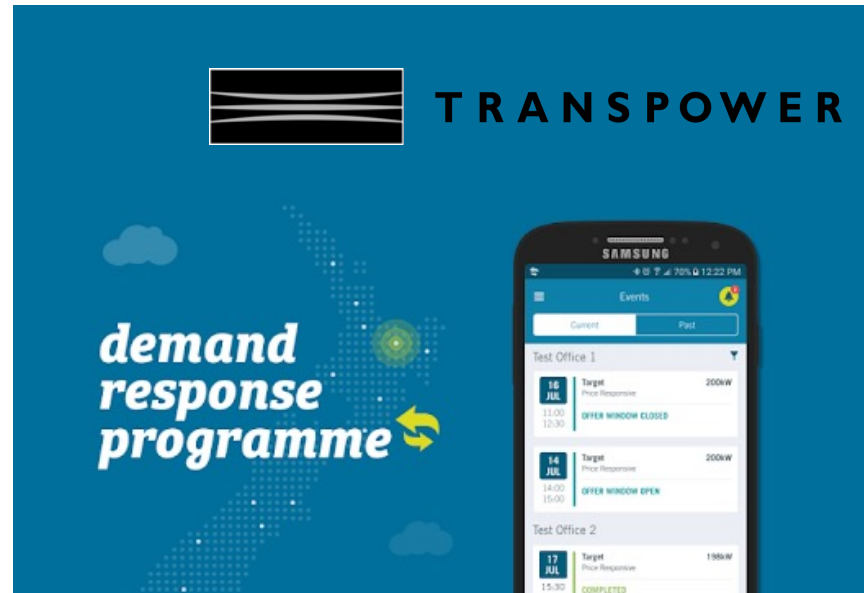
info@flexforum.nz

| Questions



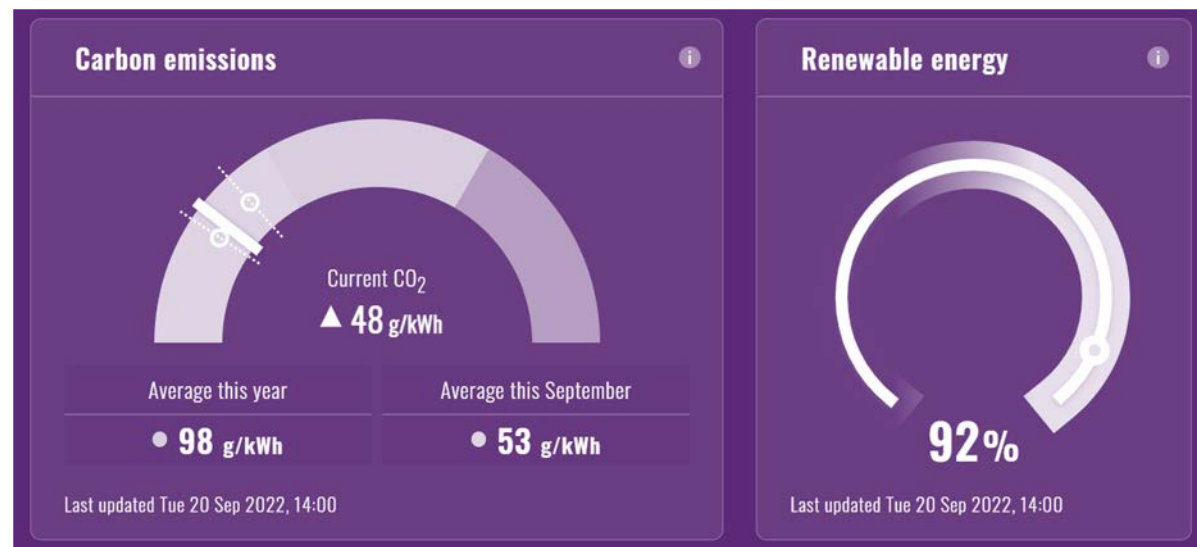
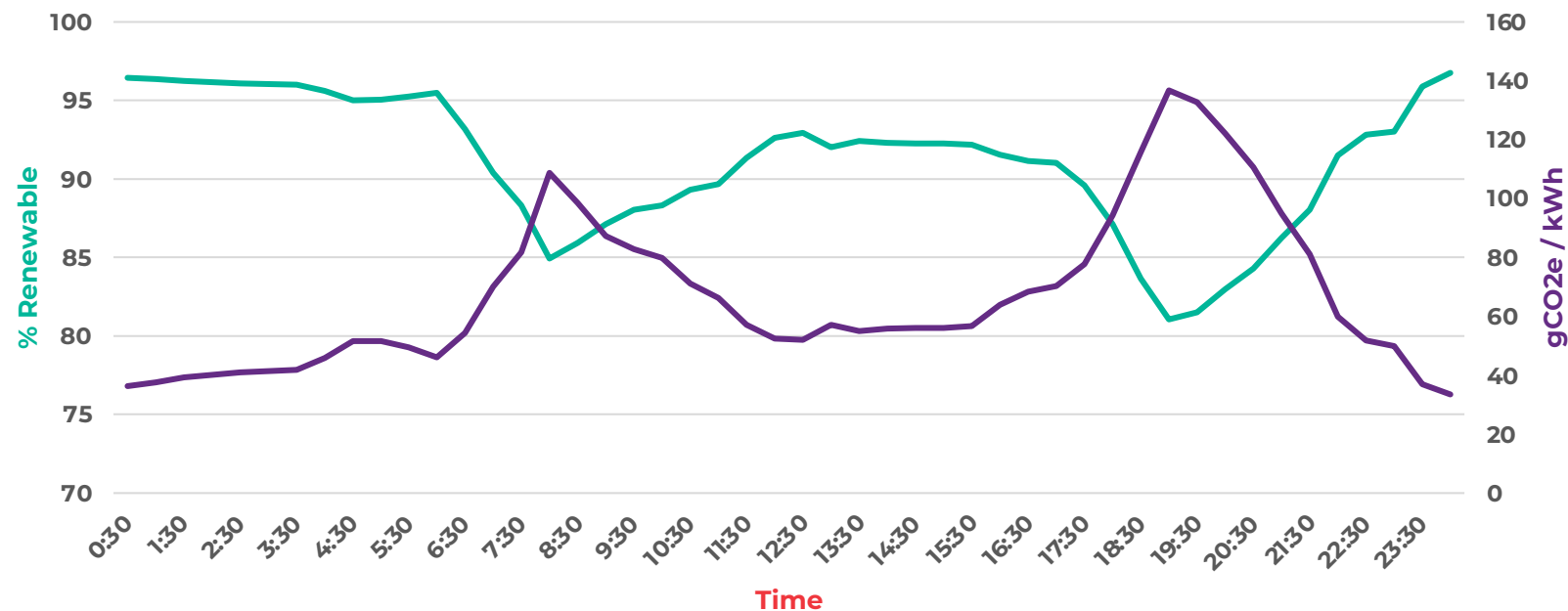
Flexibility in practice

The NZ flexibility market is growing

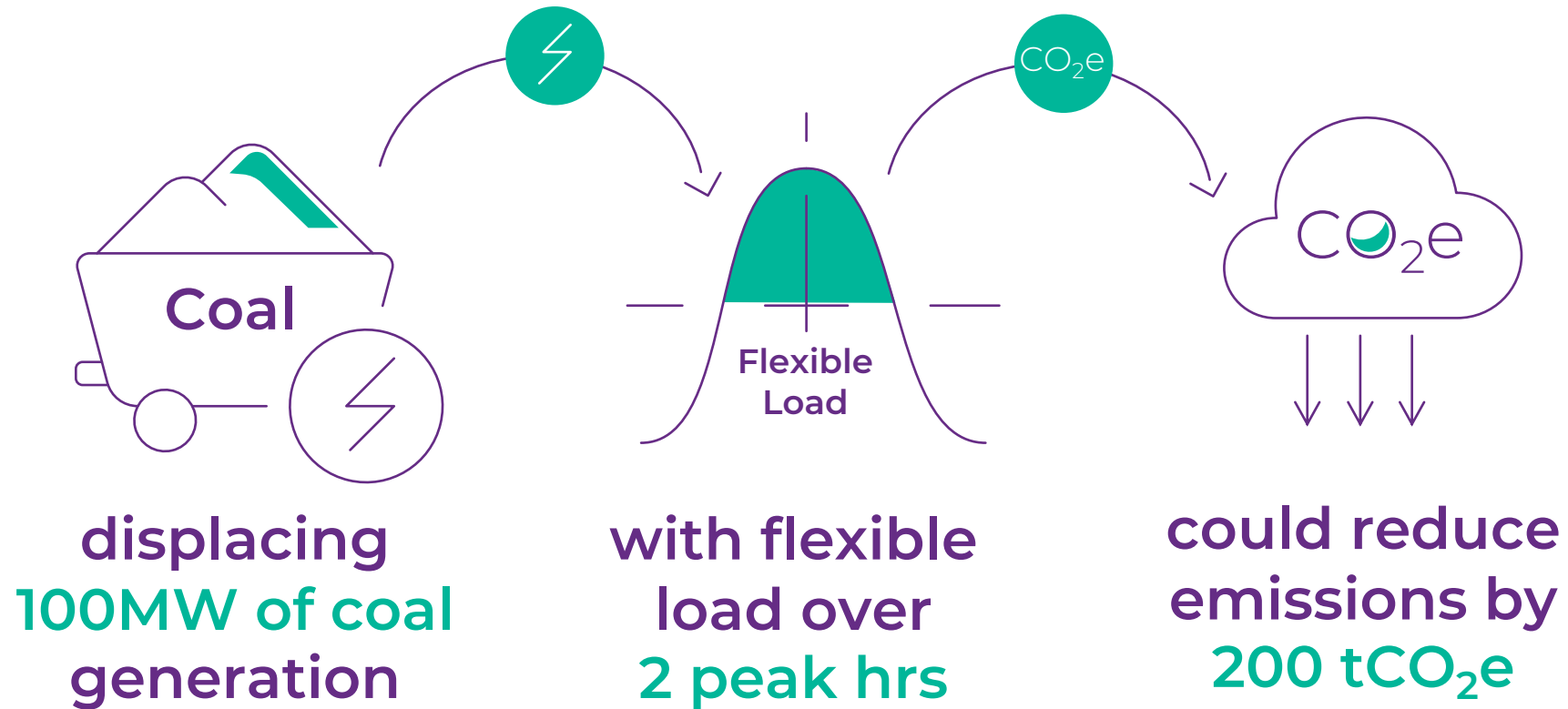




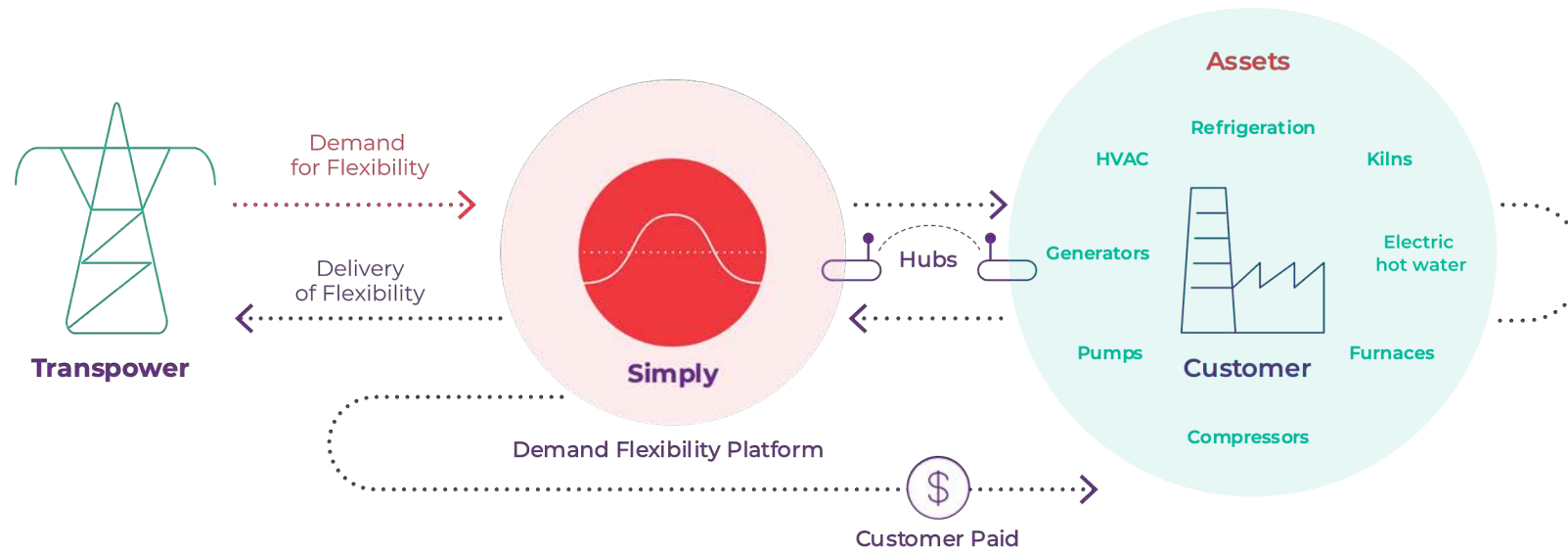
NZ Electricity Emissions – 6th Sept



The potential impact on emissions is significant



Simply's Demand Flex Programme



45
customers



70
sites



20MW+
flexible load

Multiple ways to participate

Frequency Response

Reducing load quickly for short periods.

To help keep supply and demand in balance.

EMISSIONS
REDUCTIONS



Demand Response

Reducing load for longer periods.

To help reduce grid capacity and generation constraints.



Demand Management

Shifting and/or shedding load.

To help reduce electricity and network costs.



Multiple reasons for participating



Michelle Cherrington | Group Communications & Sustainability Manager

“We’re proud to be giving the grid a helping hand by powering down our kai ora and kaimoana facility in Palmerston North, during times of peak demand.”

MOANA
NEW ZEALAND

thanks &
questions