FLEXFORUM 3

Enabling choices which maximise the value of DER and Flexibility







Join at slido.com #1843327

- Welcome and plan for the session
 - Overview of the purpose and approach
 - The FlexForum
- Context for the Flexibility Plan
 - DER, flexibility and electrification
 - Coordinated, collaborative action
 - MBIE perspective
- Breakout session 1 Actions to maximise the value of DER and flexibility
- Breakout session 2 Potential learning-by-doing
- Breakout session 3 Support for action
- Your thoughts
- Next steps

FLEXFORUM 3

A cross-industry group formed to identify practical, scalable, least-regrets steps for unlocking the value of distributed energy resources (DER) and flexibility for households, businesses, communities, the electricity system and Aotearoa New Zealand ...to enable households, communities and businesses to make choices which maximise the value of DER and flexibility

































Scope and progress - February 2022 to now

Identify the minimum specifications of the services that DER can provide, to who, when, where, how and for how much Flexibility needs Technical Commercial Operational and **Customer value &** 3 February requirements implementation services planning processes 2022 Topic B Topic A Topic C and D Topic E 1st Webinar 4 May 2022 Identify the practical, scalable, and least-regrets steps to use the services that DER can provide Issues and barriers to implementation **Next steps and recommendations** 31 August 2022 Topic E 9 August Topic E and F 2022 Support ongoing learning and collaboration across the electricity sector on real world deployment of 3 solutions to realise the benefits of DER, including identifying and resolving barriers. We are here

FLEXFORUM (3)



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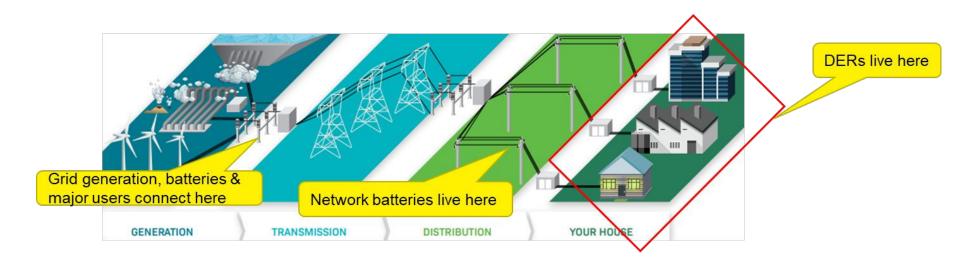
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What part of the electricity ecosystem are you from?

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Distributed energy resources (DER) are central to electrification



Many DER can be flexible (modify behaviour in response to signals or events)

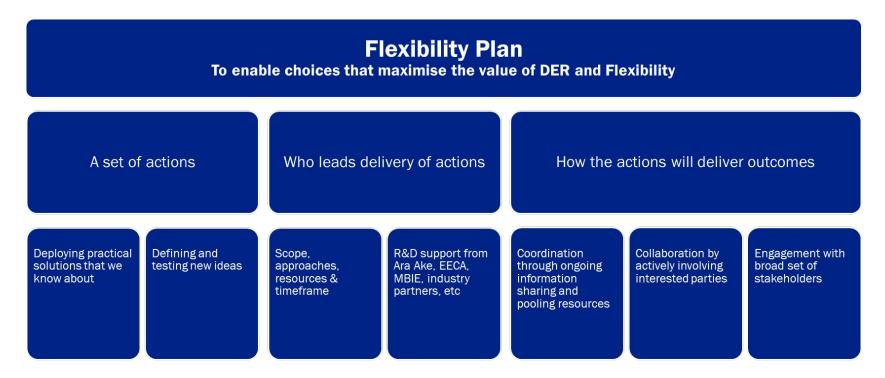
Households, businesses, and communities will decide how to use their flexible DER to optimise the benefits for themselves and the electricity sector.



What is one thing the electricity sector should do now to support rapid uptake of DER and flexibility?

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A Flexibility Plan - creating a living document to guide our efforts



DER & flexibility are part of a smarter, more affordable, and sustainable electrification journey for everyone

Looking at things from the perspective of the household or business

Step 1: Discover the menu of flexibility options available given my preferences, circumstances, budget & equipment options

Step 2: Assess the flexibility options and decide which suit me

Step 3: Enable the chosen options working through the investment and commissioning process(es)

Step 4: Day-to-day operation

Reduce energy-related capital costs

'I want the most affordable upfront outlay for meeting my energy needs'

Reduce emissions

ongoing outlay'

'I want to reduce my

emissions for the most

affordable upfront and

Reduce energy-related ongoing costs

'I want the most affordable ongoing outlay for meeting my energy needs'

Reliability & resilience

'I want a specific level of reliability and resilience for the most affordable upfront and ongoing outlay'

Electricity Market Information

· Retail & spot pricing

Network Information

- Connection & access
- Connection costs & network charges
- Network headroom and upgrade plans
- Network performance, eg, voltage
- Policy on flexibility & payment for contracted flexibility

System Information

 Policy on flexibility & payment for contracted flexibility

Purchase, installation & commissioning

- · Availability of equipment
- Connection process & timeframes

Participation & Procurement

- Access to retail pricing and service options
- Market participation requirements
 & access to market information
- Procurement processes for Network & System services

Market, Network & System Information

 Availability of actual and forecast consumption and generation balance data across the system

Dispatch, measurement & settlement

- Receive and response to signals (price or event)
- Manage contractual relationships and commitments
- Assurance equipment is maintained and available to respond
- Collecting and reporting performance data
- Settlement of financial obligations

Realise extra value from supplying Energy, Network & System services

'I want to maximise the value of my DER by supplying energy, network and system services where possible and it suits me'

Actions are based on what a household or business needs to make decisions about DER and flexibility





How would you rate the current level of coordination and collaboration (1 is low & 10 is high) to enable and support a rapid uptake of DER and flexibility?

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MBIE perspective

Enabling flexibility services from DER can support the Government's vision for a highly renewable, sustainable and efficient energy system supporting a low emissions economy, where energy is:

Accessible and affordable to support wellbeing

Secure, reliable and resilient

Supports economic development & equitable transition to low emissions

...and contribute to actions set out under the emissions reduction plan:

- Supporting New Zealanders to more actively manage energy demand, so that they have more control of their energy use and costs
- Using our highly renewable electricity system to further electrify industry and transport.

MBIE endorses the process the FlexForum is undertaking to deliver and implement an action plan.



What is the biggest opportunity of coordination and collaboration?

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3 breakout sessions - how it will work

How this will (hopefully) work...

- There will be three 7 minute sessions
- Everyone will be allocated to a breakout room
- A FlexForum member will be joining each group to listen & document the conversation on virtual sticky notes
- One group will report back after each session

Your views and comments will inform the Flexibility Plan

3 breakout sessions - purpose

Breakout session 1: Action to enable households and businesses to make choices which maximise the value of DER & flexibility

- What actions by the electricity sector would enable households and businesses to make choices that maximise the value of DER and flexibility?
- What actions should be the priority that we start first (practical, scalable, least-regrets)?

Breakout session 2: Potential learning-by-doing

 What activities has your organisation completed, have underway or is interested in starting in the next 6 months which would enable learning-by-doing?

Breakout session 3: Support for action

 What support would you need to take that action (e.g. internal buy-in, access to experts, financial support, regulatory support, facilitation of joint projects, education/reference materials, etc)?

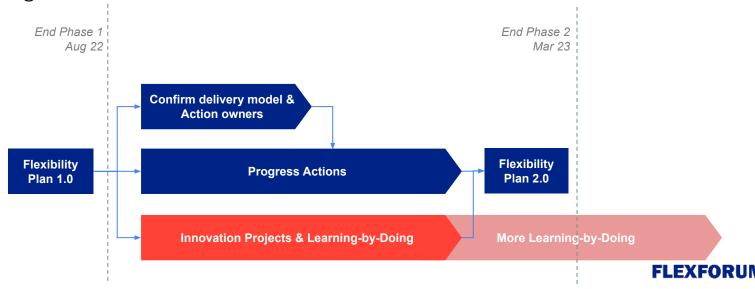
Q & A

Please raise your zoom hand

Next steps

We intend to finalise and share the initial Flexibility Plan by 31 August

- Your views will be used to refine the Flexibility Plan send them through as soon as you can
- The Flexibility Plan is the beginning, not the end we expect ongoing iteration as we learn-by-doing



Close

• Feel free to contact us to arrange further discussions or provide feedback

Thank you for your time today

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