

The image features a night-time panoramic view of a city with its lights glowing against a dark sky. A network of glowing blue lines and nodes is overlaid on the cityscape, suggesting a digital or technological theme. The top left corner has a yellow-to-blue gradient banner.

Orion

Orion Innovation Strategy

Update - 31 March 2024

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Executive summary

Our energy system must fundamentally transform to enable society's equitable transition to a low carbon, resilient future. Our increasing reliance on renewable electricity generation, the growth of distributed energy resources, and the increasing value of demand side flexibility creates new opportunities for customer participation and community resilience.

Local electricity distribution businesses (EDBs), such as Orion, play a critical role in enabling the transition - connecting customers across our region and facilitating efficient operation of the local system for the benefit of consumers.

While the broad direction of the transition is clear, there are many challenges and opportunities to be addressed along the way. We must explore, learn and innovate together – as EDBs, as an energy sector, and as a region to co-create the energy future our community seeks.

Our innovation strategy uses the intersection of intelligence, curiosity and execution to provide the structure needed to rapidly explore and learn.

Innovation will arise from the amplification of successful exploration. We will enable this to occur by:

- Defining specific challenges that align with The Orion Group strategy
- Harnessing a diverse range of options through collaboration and stakeholder engagement
- Filtering and prioritising these options
- Achieving activation through the Orion Innovation Playbook

Our guiding principles for enabling innovation are:

- Collaborate and co-create
- Act now
- Prioritise learning
- Keep options broad

Our Integrated Leadership Team govern Orion's Innovation activity, and monitor progress toward our specific challenges and alignment with our strategic intent, by measuring the direction, tempo and impact of our activity.

During the FY24 year we have trialed some new approaches to activating innovation at Orion. We used our environmental scanning process and specific challenge workshops to inform innovation priorities within our strategic focus areas.

We had a strong focus on embedding innovation into our business planning to resource initiatives and provide greater visibility of how they contribute to our strategic focus area objectives.

FY24 has been a year of trialing and adapting our innovation processes, growing collaboration, including with ENA's Future Network Forum, building on learnings and starting to monitor progress.

We invite our customers, communities, partners and stakeholders to join us on this innovation journey. To collaborate, explore and co-create a sustainable, equitable and resilient energy system for central-Canterbury and beyond – powering a cleaner brighter future with our community.

Sam Elder

General Manager Energy Futures

Our context for innovation



The Orion Group

Orion is the electricity distribution business for central Canterbury, including Ōtautahi Christchurch, powering a cleaner brighter future with our community through connection, collaboration and innovation.

Our network is both rural and urban and extends over 8,000 square kilometres from the Waimakariri River in the north to the Rakaia River in the south; from the Canterbury coast to Arthur's Pass.

Orion has a fully owned subsidiary, industry service provider Connetics, and together the two organisations make up The Orion Group.

We deliver electricity to more than 220,000 homes and businesses and are Aotearoa New Zealand's third largest Electricity Distribution Business (EDB).



Our strategic environment



Aotearoa New Zealand's electricity sector can play a major role in decarbonising the broader energy sector, improving energy affordability, and increasing energy independence.

1. Boston Consulting Group, *The Future is Electric*, 2022
2. World Energy Council, *Trilemma Index*, 2021

Aotearoa New Zealand currently has a high share of renewable electricity (82%), but only 28% of our total energy consumption comes from renewable sources. Roughly 30% of the country's gross emissions come from sources that can be decarbonised by the electricity sector. Increasing renewable electricity and electrifying transport and heat will be crucial in achieving Aotearoa New Zealand's goal of net zero carbon emissions by 2050.¹

This shift is not without systemic challenge. The Energy Trilemma² refers to the challenge of maintaining a balanced energy system that is secure, equitable, and environmentally sustainable. Orion puts our customers and communities at the heart of the trilemma. Energy leaders must manage the competing demands of each of these dimensions, especially as the energy system transitions to decentralised, decarbonised, and digital systems. All this creates inherent uncertainties in the energy sector to be explored to create innovative solutions.

The history of innovation in Aotearoa New Zealand's electricity sector dates back to the early 20th century, when the country

began to harness its abundant hydropower resources for electricity generation. In the 1980s, the New Zealand government began a process of market liberalisation and privatisation, which led to significant changes in the electricity sector, including the development of new generation technologies, such as wind and geothermal power, as well as the introduction of retail competition.

Today, Aotearoa New Zealand's electricity sector is characterised by a diverse range of generation sources, including hydro, geothermal, wind, solar, and gas-fired power stations, as well as a growing number of distributed energy resources such as rooftop solar and battery storage. The sector continues to innovate in areas such as smart grid technologies, demand response, and electric vehicle integration.

Orion owns and operates the network that provides the people of Central Canterbury with the power they need to go about their daily lives and run their businesses. Our Orion Group Strategy focus areas outline our priorities, giving direction to how we will act in this strategic environment.

Orion Group Strategy focus areas

The Orion Group Strategy focus areas outline our priorities, giving direction to how we will act in this strategic environment.

Powering a cleaner and brighter future with our community

Facilitating decarbonisation and hosting capacity at lowest cost

Facilitating decarbonisation at lowest cost refers to maximising the use of the existing network with smart technologies and better data so that we can understand network demand and maximise ways to utilise our existing network.

These insights help us to make decisions about how to build and when and how we work with flexibility service providers and customers to enable participation through flexibility. We want to be part of the solution not a blocker to the path to decarbonisation.

Investing to maintain a safe, reliable, resilient network at lowest total lifecycle cost

As an intergenerational asset manager our duty is to make long-term investments for our community. This focus area will be accomplished by prioritising cost-effectiveness and efficiency through integrated systems, designing and building a network fit for the future and continuously innovating.

Being a force for good in the communities we serve, enabling the equitable transition to a net zero, resilient future

Being a force for good refers to enabling the equitable transition to a net zero, resilient future for and with our community.

We will achieve this by: being vigilant about our changing external environment and effectively managing emerging threats and opportunities. Collaborating with local authorities and stakeholders on regional climate and energy plans. Developing authentic, respectful and collaborative relationships with Ngāi Tahu and rūnanga. Playing a proactive role, working with other trusted organisations, to understand and support our customers to close the “knowledge gap” on how they can move to a more energy efficient and greener way of living and working to reduce the environmental impact of our operations.

Creating the preferred workplace

Creating the preferred workplace is all about putting our people at the heart of everything we do through attracting, developing, and retaining a skilled and motivated team that feels included and reflects the diverse communities that we serve.

Actively looking for opportunities to better use our people’s skill and expertise and minimise their involvement in inefficient workflows.

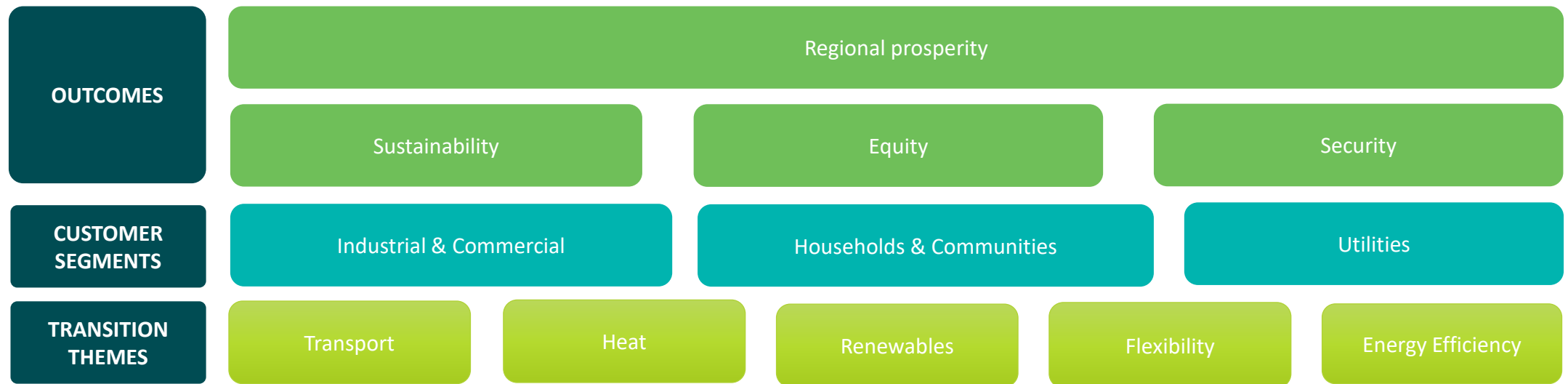
Fit for purpose capital structure

Capital structure refers to the combination of debt and equity used by Orion to finance its operations and growth. Debt comes in the form of loans while equity may come in the form of owners’ contributions and retained earnings.

An appropriate capital structure is intended to enable Orion to manage financial sustainability over the long term and enable investment to fulfil our Purpose. It should provide appropriate flexibility to manage the business, regulatory environment and adjust in response to unexpected shocks whilst also delivering an appropriate level of certainty to our key shareholders.

Our sense-making framework for the energy transition

Orion currently enables coherence across our innovation activities through a sense-making framework. This captures how activities contribute to key transition themes, customer and consumer segments and outcomes and enables development of a balanced innovation portfolio. It helps us maintain oversight of our diverse set of stakeholders and their needs as the energy transition evolves. It provides a prompt for exploration in under-served and strategically important areas.

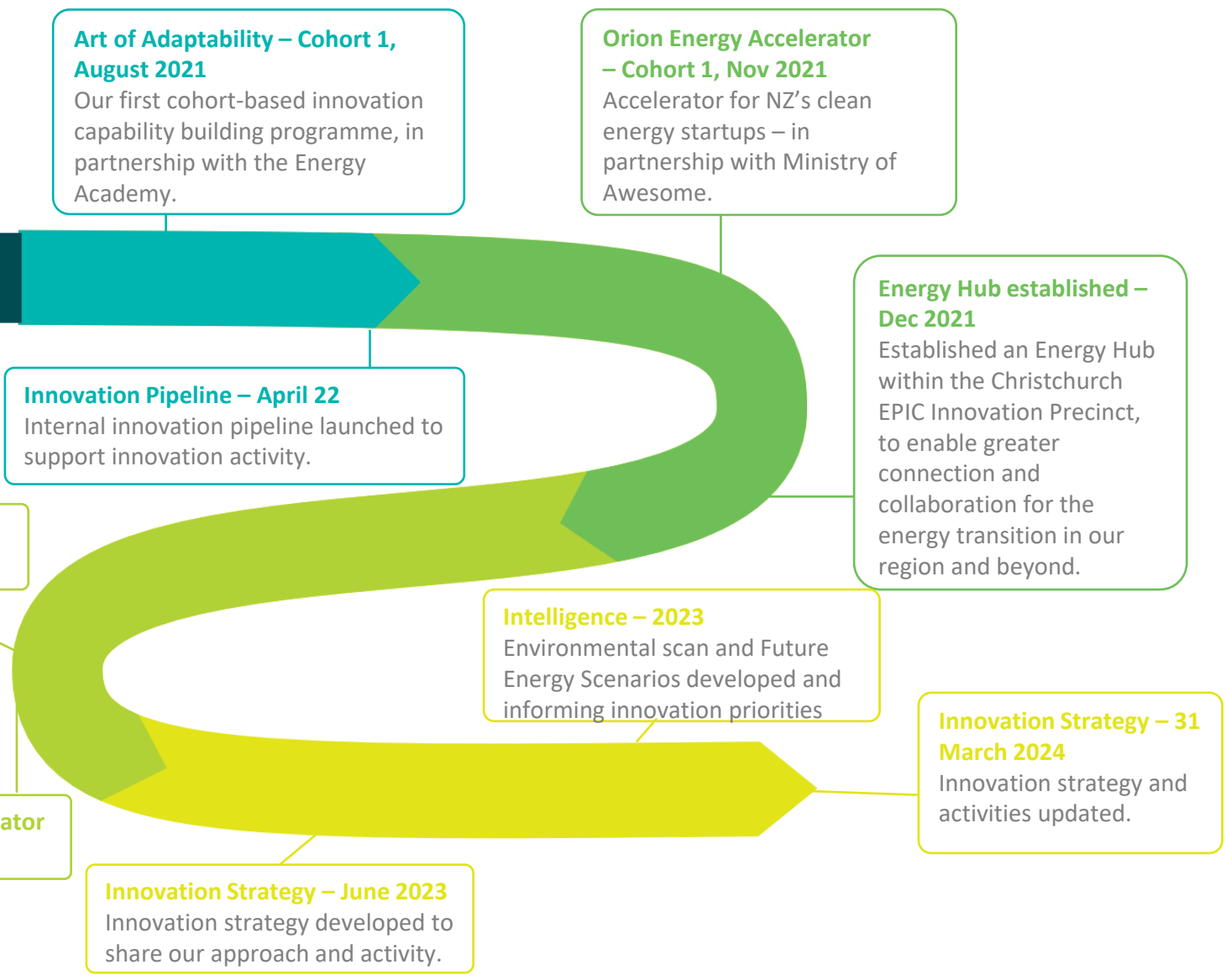


Our journey so far

Orion has been at the forefront of innovation in the electricity industry in Aotearoa New Zealand, with a focus on modernising the distribution network and integrating new technologies to improve the reliability and resilience of the electricity system.

Overall, Orion's innovative approach has helped to drive efficiency and progress in the NZ electricity industry, improving the overall reliability and sustainability of the electricity system.

We need to continue to innovate to adapt our business to the changing landscape of the electricity sector and take advantage of some exciting opportunities to improve outcomes for consumers.



What our stakeholders are saying

“We have a good relationship with Orion and see Orion as much more open than other EDBs. We consider them innovative thinkers.”

Tim Calder, Meridian Energy

In developing our Innovation Strategy, we have sought perspectives from a sample of our external stakeholders on working with Orion and what they want to see in the future:

- They see Orion as an innovative and collaborative company, **leading the way** for other Electricity Distribution Businesses.
- They appreciate Orion's openness to new ideas and willingness to trial them and **want a closer relationship** to understand Orion's strategy and constraints, particularly regulatory, to collaborate better.
- Stakeholders want to **collaborate to benefit the industry** and achieve mutually beneficial outcomes, such as influencing regulatory change and sharing funding opportunities.
- Larger customers going through energy transitions can be unfamiliar with aspects of electricity distribution and may demand more support from Orion to implement innovative solutions at scale and pace. Orion needs to understand their needs.
- Orion can enable innovation in the industry by providing access to data, using the network for trials, and funding innovation projects.
- While information flow is needed at strategic and functional levels, there is a strong desire to work on innovation projects together with Orion.
- Orion has a part to play in demonstrating what a good network looks like from a community point of view and contributing expertise in community conversations.
- Stakeholders want a clear pathway to engage on innovation.



Innovation priorities and practices at Orion

We have continued to innovate (see examples to follow and in Appendix A) in line with our purpose to power a cleaner and brighter future with our community.

Orion's FY24 innovation activity overview

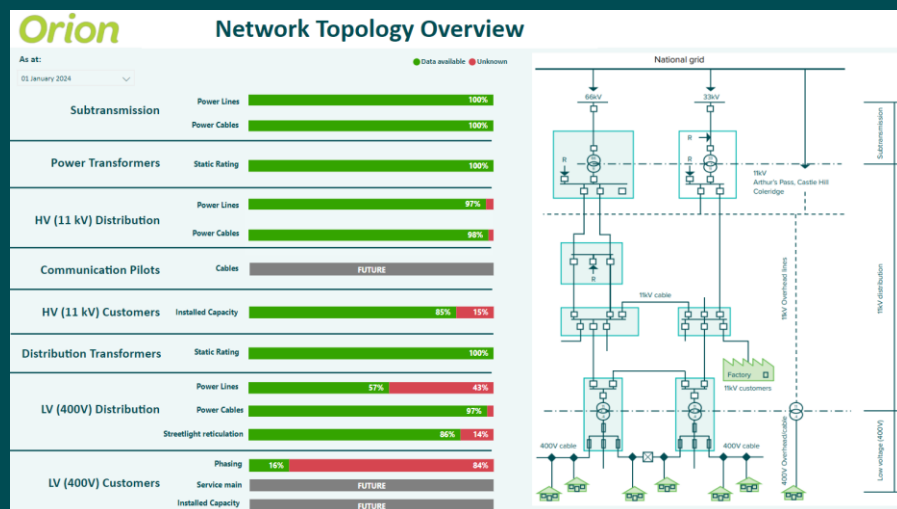
Over the past year we have put our innovation strategy into action. We have used 'intelligence' such as environmental scans on weak signals and emerging issues, and learnings from our staff through Focus Area workshops, to identify key uncertainties and develop specific innovation challenges for exploration. We have developed our governance model to include steering and advisory groups over strategic priority programmes, including flexibility and network transformation related innovation projects, to assist with prioritisation and resourcing.

We have identified and celebrated the innovation that has resulted in operational efficiencies and improvements. We have also started exploring innovation opportunities around community and residential energy resiliency and equity, with strong collaboration emerging in our region and sector.

This section will highlight some of the innovation priorities and practices underway as well as new initiatives started in FY24, and those planned. Examples of these are summarised below and expanded on in the following pages. A list of innovation initiatives are included in Appendix A.

| Orion Strategic Focus Area | Facilitating decarbonisation and hosting capacity at lowest cost | | Investing to maintain a safe, reliable, resilient network at lowest total lifecycle cost | Being a force for good in the community we serve, enabling the equitable transition to a net zero, resilient future | | Creating the preferred workplace |
|----------------------------|--|--|--|---|--|---|
| Strategic Priorities | Maximise the use of the existing network with smart technologies and better data | Maximise the scope for customer participation through 'flexibility' and other market-based solutions | Drive cost efficiency and continuous improvement across our end to end asset management life cycle | Partnering with our communities to co-create a local energy system which reflects their current and future needs and aspirations. | Play a proactive role, to identify, engage and understand our C&I customers' plans and expectations, support them to efficiently access the energy services they need and to equitably participate in and benefit from the transition. | Understanding the capability needs for the future and developing our talent profile to meet the needs of tomorrow's workforce |
| Innovation Priorities | Network Visibility and Insights | Flexibility and Market Development | Operational Efficiency and Improvements | Household and Community Energy Services | Commercial and Industrial Customer Services | Building Our Workforce |

Network Visibility and Insights



Maximising the use of the existing network with smart technologies and better data so that we can understand network demand and maximise ways to utilise our existing network

The situation

Improving network visibility and developing insights is a key workstream in our Network Transformation Programme to support the connection and use of distributed energy resources (DER) and low carbon technology. This includes improving visibility and insights gained across the network from GXP through to behind the meter – via monitoring, smart meter data, analytical technology and smart processes. Our opportunities to unlock existing capacity and optimise the performance of our network, without building more lines and cables, increase significantly through these innovative practices.

What we're exploring

The 'Visibility and System Insights for the Orion Network' (VISION) project encapsulates foundational components of this workstream.

Orion developed a new LV monitoring system using data from low voltage monitors on parts of the network. To gain higher definition visibility of the LV network, in FY24 Orion partnered with Bluecurrent (formerly Vector Metering) to access detailed operational data from 195,000 **smart electricity meters** (~90% of customers) over a five-year period. As part of Ara Ake's EDB Decarbonisation Challenge

in 2022, Orion partnered with **Gridsight**, an LV analytics and visibility platform provider, and we are also trialling **Future Grid's** platform to prove the value of bulk LV network analytics. We are using the analytics to understand distribution transformer / circuit utilisation / hosting capacity, detect electric vehicles charging and broken neutrals / high impedance faults, as well as validate our network topology.

We were able to leverage LV analytics to smart meter and monitor data into actionable insights. In particular, uplifting safety, operational decision-making, and steering strategic investments with increased network constraint visibility. This resulted in six primary workflow improvements that could yield significant value for Orion and reduce costs to customers.

What's next?

We are exploring **artificial intelligence and machine learning** methods, processes and tooling to provide advanced simulation and analytics. To increase the accuracy of our network model we will be trialling an AI-driven connectivity engine to infer network topology and apply automated corrections. The combine uplift in network model, data and analytics, will result in more revealing insights and real value.

Flexibility and Markets Development



Maximise the scope for customer participation through ‘flexibility’ and other market-based solutions

The situation

Flexibility will play a crucial role in our future energy system, as our network evolves from being purely linear to having a two-way flow. This could give our community more agency in how and when they use their electricity, in turn generating savings on their power bill.

Flexibility can be a cost-effective way to defer or avoid new investment in traditional network assets, which ultimately costs customers, and can also potentially support the decarbonisation of our region.

This year we created a Flexibility and Markets Development Programme, to coordinate areas within Orion and the wider sector to achieve customer, network and system benefits.

What we're exploring

To complement our existing tools that are critical to system security, such as hot water load management, we are developing innovative technical and commercial solutions to enable flexibility and customer participation.

Lincoln Flexibility Trial and FlexTalk: We recently announced a [partnership with Ecotricity](#) to deliver a residential battery flexibility solution in the Lincoln area to meet growing electricity demand. Implementation of this service will build on knowledge developed as a delivery partner in the Electricity Engineers’ Association

(EEA) [FlexTalk](#) trial, where we demonstrated flexible EV charging via flexibility providers using a common communication protocol.

Resi-Flex: Building on connections through FlexForum, we partnered with Wellington Electricity on the [Resi-Flex](#) project, which aims to incentivise flexibility from residential consumers by exploring commercial mechanisms in collaboration with flexibility stakeholders.

Research assessed the capability, opportunity and motivation of different consumer personas to provide flexibility and identified opportunities to streamline the customer journey and maximise participation. This insight alongside flexibility stakeholder wants and needs are available in the Resi-Flex [Phase 1 Public Report](#).

Collaboration: To accelerate the pace of the energy transition, collaboration is essential. Through active participation in FlexForum and Electricity Networks Aotearoa (ENA) Future Networks Forum, and projects in collaboration with EEA, we will continue to share, learn and align on solutions that will deliver a smart, flexible energy system.

What’s next?

These flexibility-related innovation trials are providing valuable insight and evidence on the effectiveness of different solutions, including which ones to scale and where there are opportunities for further exploration.

Operational Efficiency and Improvements



Drive cost efficiency and continuous improvement across our end to end asset management life cycle

The situation

Within Orion's core electricity network delivery departments are a range of innovation practices and exploration projects leading to improved processes, operational efficiency, and potential new services. The aim is that these will ultimately result in lower costs to customers and improved service quality.

What we're exploring

Orion is embarking on various data and efficiency improvement projects including an Integrated Asset Management programme which will enable Orion to sequence our network build and maintenance workplans with other local entities, resulting in significant cost savings.

Some of the projects and practices we have been exploring, improve the timeliness, accuracy and management of the data that feeds into this.

For example, our **Technology Driven Asset Location Capture** project has developed a new digital field capture standard for the industry, resulting in time savings of eight-fold, increased accuracy, timeliness and improved operational safety.

Other innovation projects and trials that progressed during FY24 such as **Mobile Switching**

App, and Automatic Power Restoration, have resulted in more efficient processes and improved safety, reliability and customer quality outcomes for Orion, and in some cases other EDBs, as we collaborate and share our learnings.

As part of our mahi to continuously improve the resilience of our assets by removing hazards and increasing the speed of response, we have been using drones for the last few years to find defective equipment, as well as locate lines down in particularly tricky terrain. Our **Advanced Drone Technology** trials have resulted in establishing new processes that have helped us reduce fatigue, increase staff safety, improve response times and cut down on emissions and travel time. We are also exploring new use cases such as deploying aviation markers on overhead lines and using automated drones to monitor and patrol our secure sites.

What's next?

We are also starting to explore the potential of new services and processes (such as joint purchasing) with other EDBs that will improve efficiencies and reduce costs across the sector, ultimately resulting in better outcomes for consumers.

Household and Community Energy Services



Partnering with our communities to co-create a local energy system which reflects their current and future needs and aspirations.

The situation

Meeting the current and future energy needs and aspirations of our community requires collaborative local energy planning through a whole of system lens. We need to partner to develop the frameworks, capabilities and tools to enable this.

There is a high risk that those households and communities least able to participate are left further behind, as others invest in the resources and technologies to drive down their energy costs and build energy resilience. Climate change is resulting in greater risks of power outages from natural disasters.

What we're exploring

Orion have developed a set of future energy scenarios to explore plausible transition pathways to 2050 for our region, with input from our local and national stakeholders. We have also developed an innovative **energy transition modelling toolkit** to convert these scenarios into energy demand, to inform local energy planning, network investment and flexibility opportunities.

We have established a new 'Community Energy Services' function and progressed several **energy equity and wellbeing initiatives** over the past year in partnership with the newly formed 'Canterbury Energy Wellbeing Collective'. This group has started collaborating on local energy advisory 'pop ups' and referring services.

We supported Climate Action Campus in their solar ambitions and models for a community energy hub. An energy and temperature monitoring project with **Ōtautahi Community Housing Trust** has provided insights on energy efficiency and wellbeing in 16 older and newer low-income homes, to inform more equitable options. Our home energy **Living Lab** of 16 Orion Group employee households has trialled smart home technology to provide energy use insights to both households and Orion. Orion partnered with University of Canterbury Students' Association on a **Student Energy Wellbeing Survey** in the leadup to winter 23, and a targeted energy education programme.

Orion is exploring opportunities with our communities to enhance resilience and trial innovative ways to store and distribute locally generated electricity.

This includes looking at **business models for community energy and batteries** that could benefit and reduce costs for both the network and communities. A study on **community energy needs** and conversations with community groups has resulted in collaboration with Ara Ake, Community Energy Network and others to explore a **Community Energy incubator**, which will leverage and test Ara Ake's Community Energy Guide.

What's next?

We will continue to learn alongside our communities and scale services that result in impact.

Commercial and Industrial Customer Services



Play a proactive role, to identify, engage and understand our C&I customers' plans and expectations, support them to efficiently access the energy services they need and to equitably participate in and benefit from the transition.

The situation

Our industrial and commercial customers are increasingly looking at ways to decarbonise their operations, including clean process heat technology, transport electrification, and the connection of renewable generation.

What we're exploring

Last year we improved our **customer connections journey**, establishing a Connections Futures team and launching Orion's Energy Advisory Services. They have been working with our customers and consultants to understand their decarbonisation journeys and to develop a qualified network view of the future electricity demand. The team is exploring opportunities for Orion to develop new processes and tools to support proactive engagement, increase investment certainty, provisioning future network capacity to avoid the risk of curtailing generation and ultimately enabling decarbonisation.

Orion partnered with DETA and others on the South Island Boiler Study which informed the North Canterbury [Regional Energy Transition Accelerator \(RETA\)](#) report which we worked on with EECA. Since this, through consultation with customers, we have developed a process to better understand and support our customer's **process heat decarbonisation** journey. Identifying our top ten process heat electrification customers' plans,

location, demand, and timeframes has allowed us to consider innovative approaches to support cost-effective new connections and increased capacity requests.

We are also engaging early with industrial and commercial customers on **heavy vehicle and fleet electrification** to estimate future demand over a three-to-five-year window.

We have seen a significant increase in the number of applications for **renewable energy generation** on our network and are exploring new processes and systems to process this increased demand more equitably and efficiently.

Using our process to activate innovation, we explored how we might encourage **commercial and industrial customers** to invest in and operate flexible resources. We identified several options and progressed which ones we could 'act now' on that would inform our longer-term direction.

Non-network alternatives are also being explored through commercial and industrial customer flexibility innovation projects.

What's next?

Next year will focus on consulting our customers with the aim to embed many of these new processes to support timely commercial and industrial customer decarbonisation at lowest cost.

Building Our Workforce



Understanding the capability needs for the future and developing our talent profile to meet the needs of tomorrow's workforce

The situation

Attracting, developing and retaining a skilled workforce across The Orion Group and our Service Delivery Partners is essential to Orion being able to perform our critical role in supporting growth and maintaining a safe, reliable and resilient network. Recent research indicates that across NZ the sector needs to recruit about 11,000 people by the end of the decade. Our sector operates in a tight labour market and to succeed we need to:

- help our service delivery partners improve their resilience by giving them the confidence to invest in capability
- become more inclusive and diverse to attract and retain the workforce of tomorrow

What we're exploring

Orion has trialled several innovative workforce development initiatives over the past year to help attract, develop and retain a skilled, diverse and motivated team.

We have been trialling **Future Needs workshops**, using future scenarios developed via our Network transformation programme to inform our workforce plans. We have refreshed our core behaviours framework to focus on future behaviours and are working on bringing our them to life by integrating them into our people practices (including recruitment).

The **Orion Development Programme** has trialled

several new initiatives to introduce young people at school (Power Youth / GirlBoss, Secondary Schools Education Programme, the Wonder Project) and interns from tertiary institutes to our sector and company.

Energy Academy has developed the first six industry designed, **micro-credentials** in collaboration with NorthPower and Te Pukenga. Micro-credentials help people progress in their roles or transition to other roles in the industry. This will enable the workforce to acquire skills at their own pace and get NZQA points for workplace learning. This will be transferable across EDBs, bringing efficiencies in the way we train our workforce.

Orion has also partnered in the **Energy Academy's Global Energy Quest** planned for 2024. Participants connect, research, and form visionary ideas over an immersive ten-week programme with **the innovation challenge** "How might Mātauranga Māori and other First Nations knowledge systems navigate our journey towards decarbonisation?" Involvement in this programme supports our innovation capability.

What's next

Embedding activity trialled over the last year and integrating new processes into our people practises to bring our future workplace to life is key priority for us. Additionally improving how we attract people to Orion and our sector to ensure we can close our future demand gaps.

Our approach to innovation is adaptive

Definition of innovation

Innovation is the **amplification** of successful **exploration**.

Orion will focus our energy on the things we can influence and control: collaboration, exploration and amplification.

Not all exploration will lead to the desired outcome so we will establish a broad portfolio of experiments. Our resources for experimentation are limited so we will look to collaborate across the industry and increase the tempo of activity.

Amplification is important. Many good ideas suffer a lack of attention and fade away. Our process for enabling innovation will include specific actions for experiments that are successful and specific actions for those that are not, allowing us to adapt without losing our direction.

Embracing an adaptive approach for innovation in the electricity industry

We will enable the process that leads to innovation. A process that harnesses our collective intelligence, curiosity and execution to explore and adapt with our Orion team, our industry and our community.

“Culture doesn’t drive innovation. Process drives innovation and culture arises from it.” - Dave Snowden

Change is upon our energy landscape with the emergence of climate change, distributed generation, and demand disruption. A new approach to strategy is needed as the complexity of the energy transition requires us to learn by doing, with parallel experimentation to explore and adapt.

Orion's Innovation Strategy is designed to face this real-world complexity and detect changes in the strategic environment to ensure strategic resilience. The strategy prioritises exploration over analysis, allowing for successful targeted and organic innovation.

An adaptive strategy approach enables innovation, incremental improvement, and business as usual to co-exist. Innovation doesn't make you more adaptive, being adaptive provides the foundation for innovation to occur.

We are interdependent on each other in the electricity industry. We need our stakeholders to collaborate with us. Previous funding and collaboration models may have worked in a stable environment but now inhibit innovation.

We will explore new ways of working together to face the challenges of the energy transition and co-create solutions for consumers and our industry.

This means that before we plan, we need to:

Explore, Experiment and Learn.

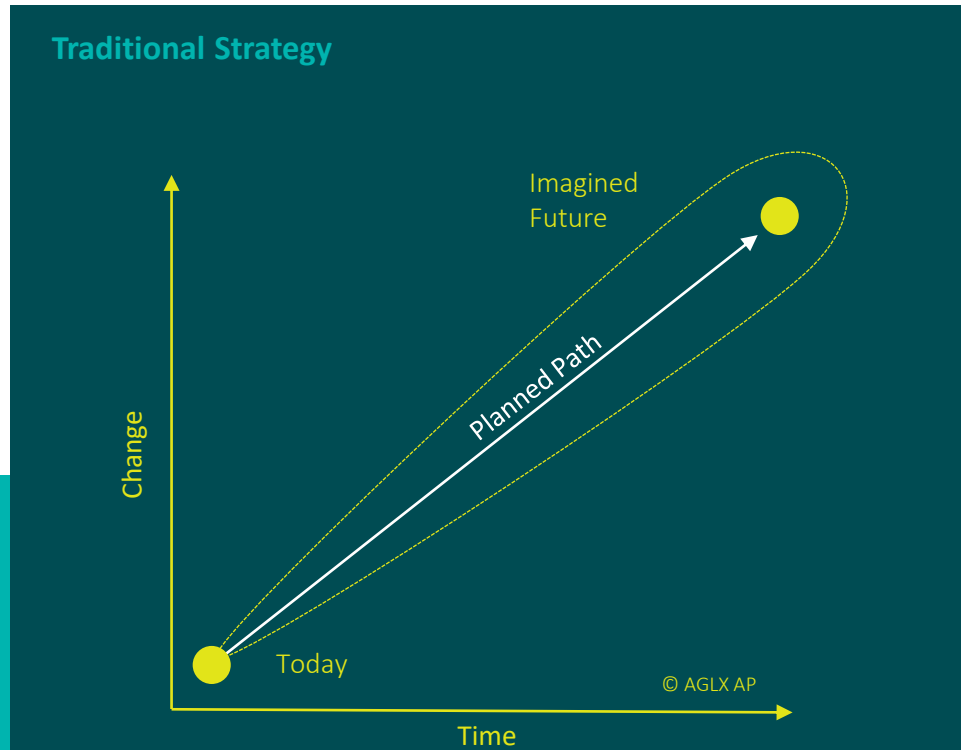
Our philosophy for this strategy can be summarised as follows:

Think Big: Our innovation strategy will target the strategic issues that we face. We will partner with stakeholders to increase the resources and diversity we bring to exploration.

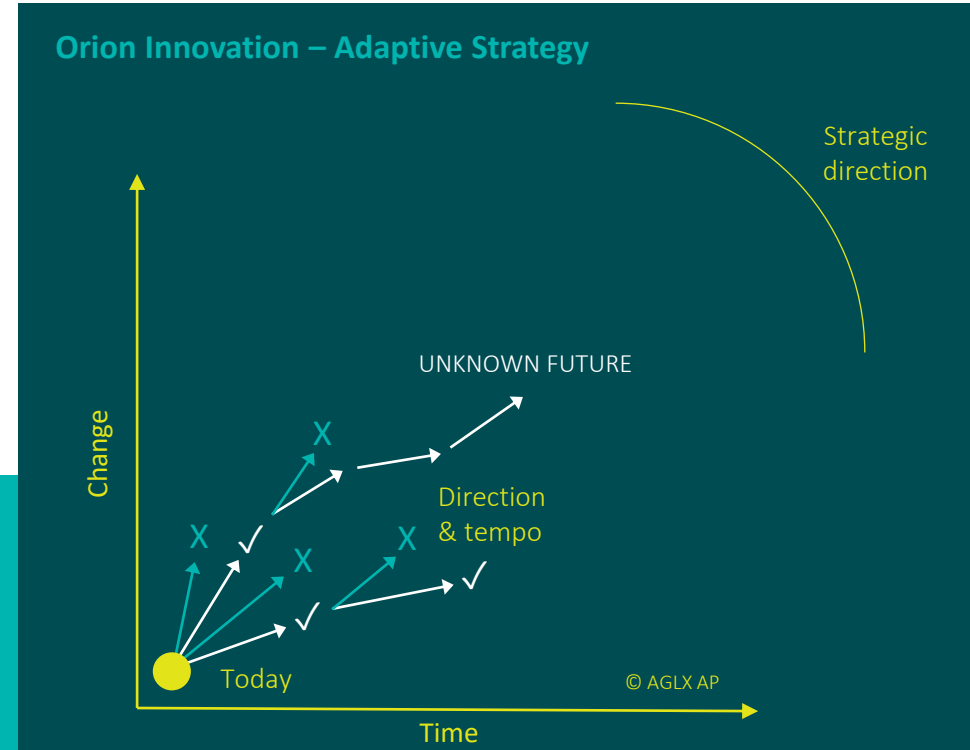
Act Small: We can't 'solve' big strategic issues, but we can establish many small actions designed to learn about what works and what doesn't. We will then focus on the amplification of the things that are working.

Move Fast: In the face of strategic change, waiting is failure. Our approach to acting fast is to ask, "what can we do right now to test this idea or take the next step forward?". This is where the Orion Innovation Playbook is most useful.

“Adaptive strategy is a dynamic movement through uncertainty, replacing the illusion of control with the excitement of exploration.” - Steve McCrone (Cynefin – Weaving Sense-making into the Fabric of our World)



When the future is knowable, we can create the best imagined future and then find a path toward it. We must be certain of the strategic environment and be able to predict changes within it. Implementing the plan is a matter of resource allocation and asset management. Managers are concerned with ensuring we are on the right path.



Our future has a lot of factors that are unpredictable. We establish a **strategic direction** of travel, and a set of principles that positively constrain our behaviour. Strategy then becomes a series of exploratory steps designed to explore and learn; small experiments in parallel, fast feedback and rapid amplification of success. Leaders manage the tempo and diversity of experimentation and commit resources to amplification of successful outcomes.

Guiding principles for activating innovation

Guiding principles serve as a foundation for decision making in the context of activating the Orion Innovation Strategy. We need the following principles because innovation activities (exploration) are often characterised by a high degree of uncertainty and unpredictability, making it difficult to rely on traditional long-term plans or detailed roadmaps. Instead, a principled approach to decision making allows for more flexibility and adaptability in response to changing circumstances while remaining consistent with Orion's strategic direction.



Collaborate and co-create

We access the diversity of perspectives from our internal and external relationships to partner in exploration. We don't go it alone, we co-create value with a range of stakeholders.



Act now

We act now to maximise the evolutionary potential of our current situation to increase the probability of innovation emerging. We don't wait for certain, ideal scenarios to exist before moving forward.



Prioritise learning

We prioritise learning over solutions in the exploration. We amplify solutions as they emerge. We monitor our exploration closely for signs of success or failure to learn and adapt quickly.



Keep options broad

We keep our options as broad as possible for as long as possible to engage collective curiosity and give us greater capacity to adapt. The purpose of innovation activity is to explore widely, not choose the one right way.

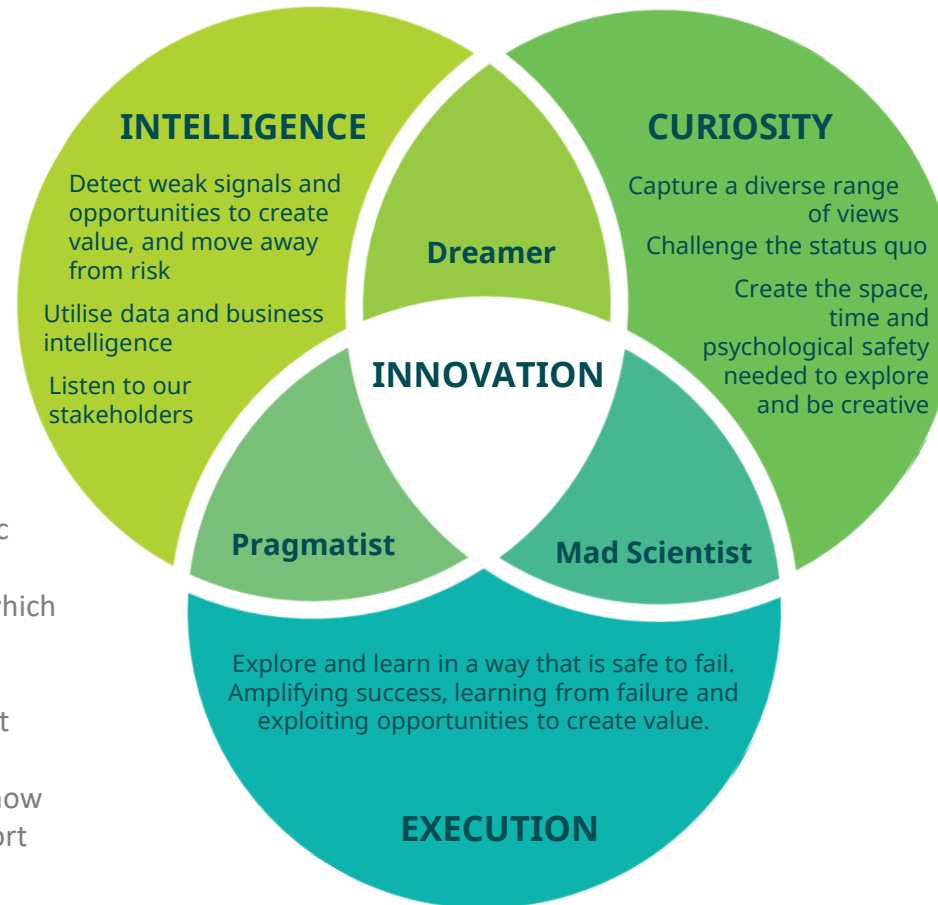
ICE Innovation[®] underpins our Innovation Strategy

Intelligence - We will increase our sensitivity to change opportunity and risk in our strategic environment. We will use the trends and uncertainties in our future scenarios work to attract intelligence from our stakeholders. This provides a target for our exploration.

The Orion Group strategy provides the strategic intent and enables the activity that leads to innovation. ICE Innovation[®] is the process by which we activate that strategic intent.

ICE Innovation[®] provides an enabling constraint that allows us to concentrate our effort on the things we can control. This strategy describes how Orion will allocate time and resources to support the process that leads to innovation.

Further explanation in **Appendix B**



Curiosity - Creating the space and time to think anew about the opportunity. How we will engage stakeholders in order to increase diversity and change perspective. We go against our natural inclination for rapid problem solving to explore a range of new possibilities.

Execution - Enabling rapid exploration activity internally and with external partners. Creating fast feedback loops for learning. Amplifying what's working and mitigating what isn't.

Our Innovation Ecosystem



As innovation can emerge from many situations, we maintain diversity of approaches to connecting and collaborating with stakeholders and customers.

We must work with our network of stakeholders to build shared understanding, collaboratively explore solutions and create long-term benefit for consumers.

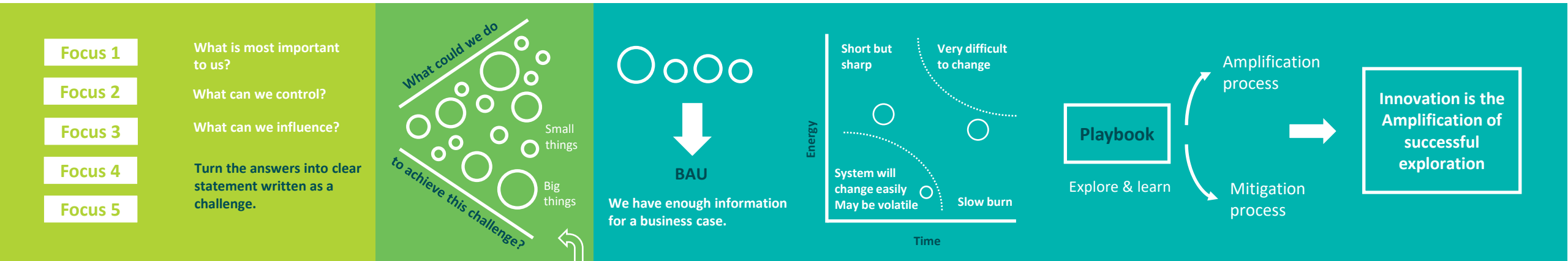


Our innovation process



Our process for activating innovation

| Intelligence | | Curiosity | Execution | | | |
|--|--|--|--|--|--|--|
| STRATEGY | DIRECTION | OPTIONS | FILTER | PRIORITISATION | ACTION | AMPLIFICATION/MITIGATION |
| Strategic focus From the Orion Group strategy we get our five focus areas. | Specific Challenges Ask clarifying questions and establish the domain of our control. Specific challenges give us a clear sense of direction and urgency but don't constrain options. This enables targeted innovation. | Increase the diversity of ideas Engage curiosity and harness disagreement (creative friction). Engage widely and find multiple perspectives. | Context filter Which things have existing validated solutions and could fit within our operational budget, expertise or capacity. Wherever we see uncertainty we need to explore and learn. Filter out options that can be executed via existing process and capability. | Determine time & energy We can't do it all. It is too early to prioritise via ROI or balanced scorecard. These require knowledge of the future. Our method is to look at the energy and time needed to implement the idea and look for the things that are lower energy and available now. These are the next steps. | What will we do? The Orion Innovation Playbook is used to action our ideas. The sum of the playbook activity is a broad set of actions that are designed to explore uncertainty and are coherent with our chosen direction. | Innovation & learning Not everything will succeed. If it does then we are not pushing the boundaries of our knowledge. Experiments that fail to achieve their aim will provide useful information. Experiments that succeed can be amplified and scaled. This is innovation. |

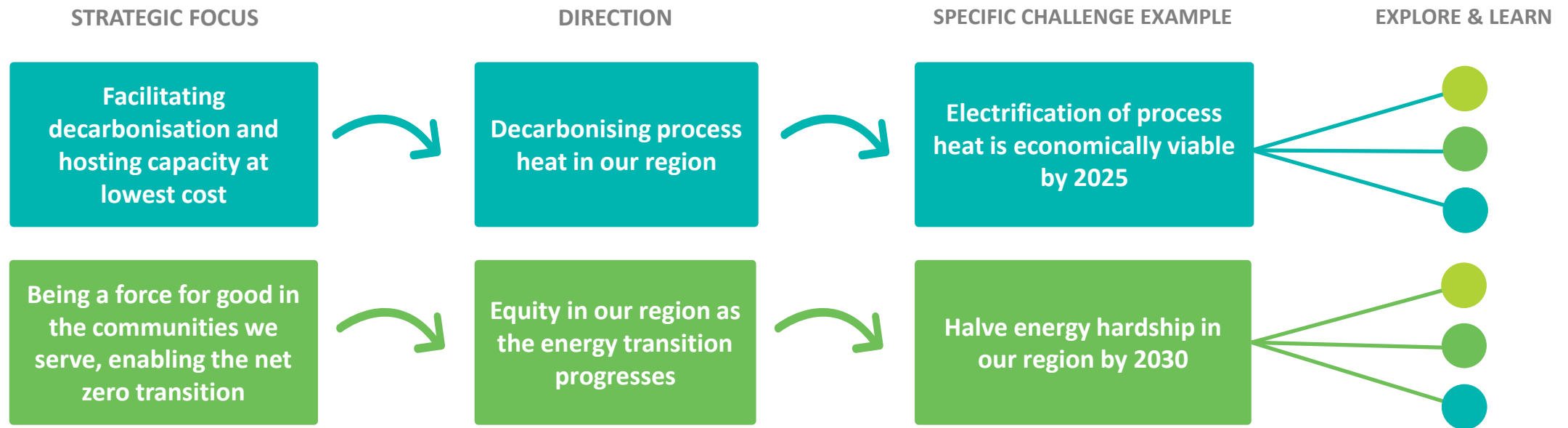


Organic ideas and hypotheses from inside and outside Orion

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Moving from Orion's Group Strategy to targeted exploration

The examples below illustrate how we create the flow from our Group Strategy focus areas to targeted exploration. We reduce granularity on our focus areas by identifying where uncertainty lies and what we can control and influence. We create a specific challenge statement to give direction to our exploration and as a call to action for collaborators. As a diverse group we decide on a portfolio of experiments to explore and learn.



Where is there uncertainty?
 What is important to us?
 Where could we get the most impact?
 What can we control or influence?

What is a quantifiable and time-bound ambition that will stimulate action?

What are the barriers or enablers?
 What are the different ways we could influence this?
 What assumptions have we made that we can test?
 Who can we collaborate with?
 What can we explore today?

Innovating together

A cleaner, brighter future for our communities will only be achieved through deep, authentic collaboration. We collaborate across the sector, with adjacent sectors and within our local community.



ENA represent all 27 lines companies which operate the poles and wires delivering electricity to every region across Aotearoa.

Through working groups and forums such as the Future Network Forum, Orion supports ENA's collective efforts to helping deliver a low-carbon future for New Zealanders, based on reliable, safe and affordable electricity networks.

Find out more at:
<https://www.ena.org.nz/about/>



The FlexForum is a cross-industry group formed to identify a set of actions to integrate distributed energy resources (DER) into the electricity system and markets to maximise the benefits for Aotearoa New Zealand.

As a member of the FlexForum, Orion are supporting coordination and collaborative action to enable a smart and flexible energy system.

Follow their progress at
<https://www.flexforum.nz/>



Powered by **Orion**

Energy Hub located in EPIC, Christchurch's Innovation Precinct, is a regional space for those working on energy transition to gather, connect, share, learn, and innovate together.

Orion Energy Accelerator: supporting high impact energy innovations.

Energy Academy: Transforming the way the industry develops capability.

Energy Futures Lab: collaboratively experimenting on energy's Just Transition.

To contact us about innovation, visit www.oriongroup.co.nz/corporate/innovation/

Governance for innovation activity



Governing the flow of innovation

Orion's Integrated Leadership Team govern the flow of innovation by:

1. Setting the direction

2. Managing the tempo

3. Allocating resources

4. Amplifying success

Our innovation governance process focuses on the following:

- Strategic direction of the innovation programme and alignment to the business vision and strategy.
- The principles and process as outlined in the strategy are being followed before funds are allocated for experimentation. Ensure visible and transparent points of accountability exist at all different levels of the innovation programme.
- Innovation is occurring across the organisation and is not confined to any particular function.
- Any high-level constraints to enabling innovation are identified and managed. All risks being actively managed and all issues encountered being reviewed and addressed appropriately.
- Innovation success is being communicated with maximum effect both internally and externally.
- We should not seek to improve, change or determine the likelihood of success of any innovation activity, unless they are directly involved in its activation.

Obstacles to exploration

We enable innovation best by taking a learning-centred approach to exploration and remove obstacles to innovation such as funding and reporting that require pre-determined outcomes. Orion and industry collaborators need to strive for learning rather than 'success' in exploration. There are some common risks and pitfalls which we must avoid or remove to enable exploration:

Picking winners

Our Innovation Strategy provides the structure that allows a broad range of experiments to occur, amplifying successes and mitigating failure. By diversifying efforts across multiple experiments, the risk of one particular project failing is minimised, while the cumulative knowledge gained from the entire portfolio drives meaningful progress.

The Good Idea Fairy

The Good Idea Fairy is when senior managers provide too much advice on experiment design and execution or demand regular updates. This will inevitably diminish the motivation of the team and decrease their curiosity.

Problem solving

If we cast strategic challenges as problems to be solved, we will quickly shift back to our comfort zone of Intelligence and Execution. Challenges should stimulate exploration not solutions development.

Waiting

In times of uncertainty and change, waiting is failure. Our innovation process is designed to rapidly stimulate multiple parallel experiments. Waiting for the right time to start or until other things are finished will lead to systemic inertia.

Focus on Return on Investment

Over emphasis on the Return on Investment (ROI) or immediate outcomes of an individual experiment stifles innovation. Funding for early-stage exploration is vital, even when the specific payoff is uncertain, as the insights gained informs further innovation. This contributes to the collective impact and value generated across a diverse portfolio of experiments.

Monitoring our progress

We will monitor the success of innovation by tracking the Direction, Tempo and Impact. We are more interested in what the measure is telling us about our progress than setting specific targets.

We will monitor our measures and if we find more useful measures we will adapt to use new ones.

“When a measure becomes a target, it ceases to be a good measure”
– Simplification of Goodhart’s Law.

DIRECTION

Are we moving toward our strategic direction?

TEMPO

Are we progressing at the right pace to address challenges?

IMPACT

Are we realising the desired outcomes?

COLLABORATION

How well are we working with others?

TIME & ENERGY

Are we allocating the right resources and leveraging available funding?

AMPLIFICATION

Are we amplifying learning, including from others?

Appendices

Appendix A: Orion's Innovation Activity

| Strategic Focus Area | Start Date | Activity Name | Description | Status | Collaborators | Themes |
|--|------------|---|---|---------|---|---------------------------------|
| Facilitating decarbonisation and hosting capacity at lowest cost Strategic priority: Maximise the use of the existing network with smart technologies and better data | FY23 | 'Visibility and System Insights for the Orion Network' VISION | 'Visibility and System Insights for the Orion Network' (VISION) project, includes improving visibility and insights gained across the network from GXP through to behind the meter – via monitoring, smart meter data, analytical technology and smart processes (including some of the innovation activities listed below). Our opportunities to unlock existing capacity and optimise the performance of our network without building more lines and cables, increase significantly through these innovative practices. | Live | | Utility, Digitisation |
| | FY23 | EDB Challenge - Gridsight | Pilot implementation of the Gridsight platform to identify network constraints, electric vehicle locations and broken neutrals as well as validation of our network topology in the Milton Zone Substation supply area. This project will support our LV network understanding workstream by centralising our LV data sources to generate insights, such as the use cases covered above, in the Milton area. The trial will be scaled to network level with full ongoing smart meter data. During FY24, Phase 1 was completed. During Phase 2, the platform is being tested with updated data and use cases will be assessed with internal users. | Live | Gridsight | Utility, Transport, Renewables |
| | FY23 | EDB Challenge – ANSA Holdings | Pilot project to increase common understanding and approach to electric vehicle and solar PV hosting capacity amongst distribution businesses through the development of a dynamic dashboard for displaying ANSA hosting capacity results based on user inputs. This project will increase the useability of hosting capacity results to support Network Development and Customer Connections workflows for network optimisation or upgrade. Paired with network hosting capacity studies, it will also contribute towards making LV hosting capacity publicly available to customers. Release 1 of the results dashboard is expected end of January 2024 for internal testing. | Live | ANSA (Advanced Network Simulation and Analysis) | Utility, Transport, Flexibility |
| | FY24 | Future Grid Analytics Trial | Experiment and determine what network and customer insights are achievable with LV circuit monitoring data and household smart meter data and the accuracy of these insights across the whole of our network . Additionally, to understand Future Grid's capabilities, service offering and integration options. | Live | Future Grid | Utility, Transport, Renewables |
| | FY24 | Nexans AI Synthetic Connectivity Model Trial | Understand accuracy and data outputs of AI GIS connectivity correction. | Live | Nexans | Utility |
| | FY24 | LiDAR capture of sub-transmission towers | We have partnered with an Australian based company to capture and display our towers in urban Christchurch to check for electrical and vegetation clearances. We plan to do this periodically to check for any encroachment over time, and we'll continue to capture, via helicopter or Drone, other areas of our network. | Live | | Utility |
| | FY25 | Predictive Fault Analytics – 11kV high impedance fault detection | Collaboration with University of Canterbury (UC) to host current and voltage sensors. Testing and calibration of non-contact sensors. Monitoring and identification of fault precursors. Synthesize transient data to identify high impedance fault activity and testing the fault location algorithm to determine the accuracy of the predicted fault. | Planned | University of Canterbury | Utility |
| | FY25 | Lifespan estimation of distribution transformers | Develop a thermal model of a distribution transformer that can be used to predict the temperature distribution within the transformer under various operating conditions. The model will be used to develop methodologies for testing transformers under various scenarios and to develop data logging instrumentation which can be deployed in the field to monitor the temperature of transformers in real time. | Planned | | Utility |

Appendix A: Orion's Innovation Activity

| Strategic Focus Area | Start Date | Activity Name | Description | Status | Collaborators | Themes |
|--|------------|--|--|----------|--|---|
| <p>Facilitating decarbonisation and hosting capacity at lowest cost</p> <p>Strategic priority:</p> <p>Maximise the scope for customer participation through 'flexibility' and other market-based solutions</p> | FY23 | Lincoln Flexibility Trial | Trialing the use of flexibility services in Lincoln to delay network build in this area, saving our customers money, at no sacrifice to the security of power supply to the area. Orion's objective is to provide energy security at a lower cost than new network infrastructure and implement a solution that will also support the transition to a lower carbon energy supply. During FY24, the architecture for short-term Orion Flex Management System (FMS) has been finalized, and end-to-end implementation of a Minimum Viable Product (MVP) integrated into Orion systems up to the Flexibility provider | Live | Ecotricity | Flexibility, Households |
| | FY23 | Future of hot water flexibility | Analysing local hot water load management trends and engaging with retailers to explore the impact of their hot water trials with household consumers and how to address these to maintain security, while maximise whole-of-system value to consumers. During FY24, we have identified Key Performance Indicators (KPIs) for controllable load as a starting point to monitor trends; Investigated control technologies, and engaged with energy retailers | Live | Various retailers | Flexibility, Security, Households, Heat |
| | FY23 | Thermal storage | Supporting a desktop study to assess the business case for a customer exploring installing a thermal storage system to smooth out energy demand peaks during production. Opportunity for Orion to explore how to support low-cost decarbonisation for industrial customers by encouraging flexibility through commercial mechanisms. | Complete | | Industrial & Commercial, Flexibility, Affordability, Sustainability. |
| | FY23 | EEA FlexTalk | Collaborative industry project led by EEA and co-funded by EECA, which seeks to demonstrate a common communication protocol for managing EV charging via flexibility providers. The project will establish best practice guidance to support the integration of smart EV chargers into a flexible energy system and inform any necessary regulation. During FY24 we have supported capability building in collaboration with EDBs and Flex providers, Flex Programme or services co-designed, Dispatch protocols were identified with one (OpenADR) tested. | Live | EEA, EECA, Aurora, Electra, Openloop, Evnex, Cortexo, Transpower, etc. | Sustainability, Security, Households, Industrial & Commercial, Transport, Flexibility |
| | FY23 | Resi-Flex | Exploring how to encourage flexibility from residential households through commercial mechanisms with flexibility suppliers. This will directly benefit customers who provide flexibility through incentives by enabling the value stack and indirectly benefit all network customers by enabling decarbonisation at lowest cost. During FY24, a Public Report was published; a Commercial Framework & tool to evaluate flexibility has been shared with other networks via the Electricity Networks Aotearoa (ENA), and we are currently selecting partners to co-design trials with. | Live | Wellington Electricity | Households, Flexibility |
| | FY24 | Commercial and Industrial flexibility and reducing winter peak demand | Exploring how to maximise demand response and support the system operator around winter peak issue (2024 and beyond), as well as develop an approach to promoting additional flexibility from commercial and industrial and major customers. This will benefit customers who provide flexibility and reduce the risk of winter blackouts for all customers. | Live | | Flexibility, Industrial & Commercial, |

Appendix A: Orion's Innovation Activity

| Strategic Focus Area | Start Date | Activity Name | Description | Status | Collaborators | Themes |
|--|------------|---|---|----------|---------------|---|
| Investing to maintain a safe, reliable, resilient network at lowest total lifecycle cost | FY23 | Advance drone technology | We have explored how advanced technology and drones can expedite the detection and diagnosis of faults during power outages. By using thermal imaging and live streaming capabilities, faults can now be identified significantly faster, reducing outage durations, and improving operational safety. We have collaborated with other distribution networks to share and scale the benefits of this technology across the industry. We have continued to explore other use cases for drones and advanced technology such as deploying aviation markers. | Complete | | Security, Utility, Digitalisation |
| | FY23 | Technology Driven Asset Location Capture | Development and implementation of a digital field capture standard that conforms to the Surveyor General's Underground Utility Standard - leveraging technology, so far saving 8 x in time, increases in accuracy, timeliness and improved operational safety. Real-time kinematic positioning technology providing sub 10cm accuracy in Greenfields application. Capability of accurate imagery has been applicable to solving other issues such as surveying errors etc. Next steps include enhancing capability with handheld capture + making imagery/data more available to stakeholders | Live | | Security, affordability, Utility, Digitalisation |
| | FY23 | Mobile Switching iPad app (Peek) for electronic Permits and other enhancements | Enhancements to our mobile app for gathering field incident data and improving the safety and efficiency of field switching work. This is innovative as we are contributing to the design and specification of new and enhanced features in this product that are possibly world leading. Design and specification with OEM (Synerty) to bring electronic permits and other enhancements into the mobile switching app. Developing stage, aiming to finish at the end of May 2024. | Live | Synerty | Digitalisation |
| | FY23 | Automatic power restoration | Implemented an automated switching algorithm on around 170 feeders across the network. When an 11 kV network fault occurs, the system looks at indications from line fault indicators in the field, does some power flow calculations and then automatically reconfigures the network to restore power to as many customers as possible. Project is now live on around 95 feeders. We are now working on fine tuning to enable this on more feeders by mid 2024. | Live | | Regional Prosperity, Security, Community, Utilities |
| | FY24 | Artificial Intelligence/ Machine Learning /advanced analytics | Exploring artificial intelligence and machine learning methods and processes and tooling to provide advanced analytics for visibility (maintenance & infra planning), forecasting (infra planning) and flex applications. Trialing analytics with smart meter and LV monitoring data to identify use cases and insights. | Live | | Digitalisation |
| | FY24 | Digitisation of Storage Facilities | We have worked with Connetics to digitise our various storage locations to facilitate almost real time visibility and movements of what we've got in stock and where it is. Orion staff have visibility, via a Connetics portal, of all stock. | Live | Connetics | Digitalisation |

Appendix A: Orion's Innovation Activity

| Strategic Focus Area | Start Date | Activity Name | Description | Status | Collaborators | Themes |
|---|------------|---|--|----------|--|--|
| Being a force for good in the community we serve, enabling the equitable transition to a net zero, resilient future | FY23 | Orion Energy Accelerator - Empower Energy | Empower Energy is a Canterbury-based energy start-up who will build an innovative, nationwide electricity redistribution scheme that empowers solar panel owners to share their surplus power with people experiencing energy hardship. They won the 2021 Orion Energy Accelerator and are seeking further investment to develop their offering. Since then, Orion has supported Empower Energy to develop Minimum Viable Product and with a Trustee in the charity and an advisory board member. | Complete | Empower Energy, Ara Ake, Ministry of Awesome | Equity, Households, Renewables |
| | FY23 | Customer Connections Journey | We ran several workshops with major customers and their consultants to understand their decarbonisation journeys and opportunities for Orion to develop new processes and tools to support proactive engagement, increase investment certainty and enable decarbonisation. This led to the development of a Connection Futures team to provide pre-application consultative support for complex commercial and industrial customers. In addition, we have launched Orion's Energy Advisory services, to develop a joint approach to help customers to realise decarbonisation ambitions in collaboration with their own consultants. The desired outcome of these services is to obtain independent advice and support our teams to efficiently explore options for large scale capacity requests and non-wire alternatives. | Live | Various including engagement with EECA, DETA and CIAL. | Regional Prosperity, Utilities, Industrial & Commercial, Transport, Heat |
| | FY23 | Local indigenous forest offsetting service | Explore how Orion can support linking local landowners with local businesses to enable carbon offsetting with indigenous forests. This opportunity empowers both landowners and organisations to enter a genuine partnership to manage and operate in a sustainable and climate responsible manner. Orion would also services would include: help with decision making, monitoring, internal reporting, and celebrating success. This is enabling us to deliver our electricity lines service to consumers with lower net emissions and address any future bio-diversity or nature related risks that may emerge. | Complete | | Sustainability, Community, Utilities |
| | FY23 | Offset carbon credits | Exploring ways to offset our carbon emissions related in a manner that will lower costs to customers. | Complete | | Sustainability, Utilities |
| | FY23 | Living Lab | Orion is developing a Home Energy Living Lab to better understand the implications of changing household energy profiles and knowledge needs of our residential customers, and trial products or services that support the low-carbon energy transition. As we gather insights and learnings, we are exploring expanding the project in collaboration with partners. | Live | | Households |
| | FY23 | Otautahi Community Housing Trust | Orion are working with Otautahi Community Housing Trust (OCHT) on a project to understand energy consumption and environmental factors to explore how this could help OCHT improve their decision making on building portfolios. It provides tenants involved the opportunity to improve their energy efficiency while maintaining a healthy home. | Live | Otautahi Community Housing Trust | Households |
| | FY23 | EcoBulb - Home Energy Saver Pilot | Supporting energy saving measures and advice in more than 800 households in Christchurch low-income suburbs with network constraints and analysing impact on load on monitored feeders, in collaboration with EcoBulb, Christchurch City Council (CCC) and Support for Energy Education in Communities (SEEC) funding. | Complete | EcoBulb/CCC/SEEC | Households |
| | FY24 | Canterbury Energy Wellbeing Collective | We have established a new 'Community Energy Services' function and progressed several energy equity and wellbeing initiatives over the past year in partnership with the newly formed 'Canterbury Energy Wellbeing Collective'. This group has started collaborating on local energy advisory 'pop ups' and referring services. | Live | Various | Community, Households, Equity |
| | FY24 | Energy Transition Modelling Toolkit | Developed an innovative energy transition modelling toolkit to convert future energy scenarios into energy demand, to inform local energy planning, network investment and flexibility opportunities. | Live | | |
| | FY24 | Community Energy - discovery | Orion is exploring opportunities with our communities to enhance resilience and trial innovative ways to store and distribute locally generated electricity. A study on community energy needs and conversations with community groups has resulted in collaboration with Ara Ake, Community Energy Network and others to explore a Community Energy incubator to bring the Community Energy Guidelines to life. We are also exploring business models for community energy and batteries that could benefit both the network and communities. | Live | Ara Ake, Community Energy Network | Community, Households, Equity, Renewables |

Appendix A: Orion's Innovation Activity

| Strategic Focus Area | Start Date | Activity Name | Description | Status | Collaborators | Themes |
|----------------------------------|------------|--|---|--------|---|--------|
| Creating the preferred workplace | FY24 | New workforce plans and people practices process | Orion has trialled several innovative workforce development initiatives over the past year to help attract, develop and retain a skilled, diverse and motivated team. We have been trialling Future Needs workshops, using future scenarios developed via our Network Transformation Programme to inform our workforce plans. We have refreshed our core behaviours framework to focus on future behaviours and are working on bringing our them to life by integrating them into our people practices (including recruitment). | Live | | |
| | FY24 | Energy Academy – Global Energy Quest | Orion has partnered in the Energy Academy's Global Energy Quest planned for 2024. Participants connect, research, and form visionary ideas over an immersive ten-week programme with the innovation challenge "How might Mātauranga Māori and other First Nations knowledge systems navigate our journey towards decarbonisation?" Involvement in this programme supports our innovation capability development and has the potential to identify innovation ideas we may wish to explore. | Live | Energy Academy, EECA, Orion, Northpower, Chch City Council, Canterbury Tech, Te Matarau, Business NZ Energy Council, Young Energy Professionals | |
| | FY24 | Energy Academy – Workforce Pathways and micro-credentials | Energy Academy has developed the first six industry designed, micro-credentials in collaboration with NorthPower and Te Pukenga. Micro-credentials help people progress in their roles or transition to other roles in the industry. This will enable the workforce to acquire skills at their own pace and get NZQA points for workplace learning. This will be transferable across EDBs, bringing efficiencies in the way we train our workforce. | Live | | |

Appendix B: ICE Innovation

ICE Innovation® Framework

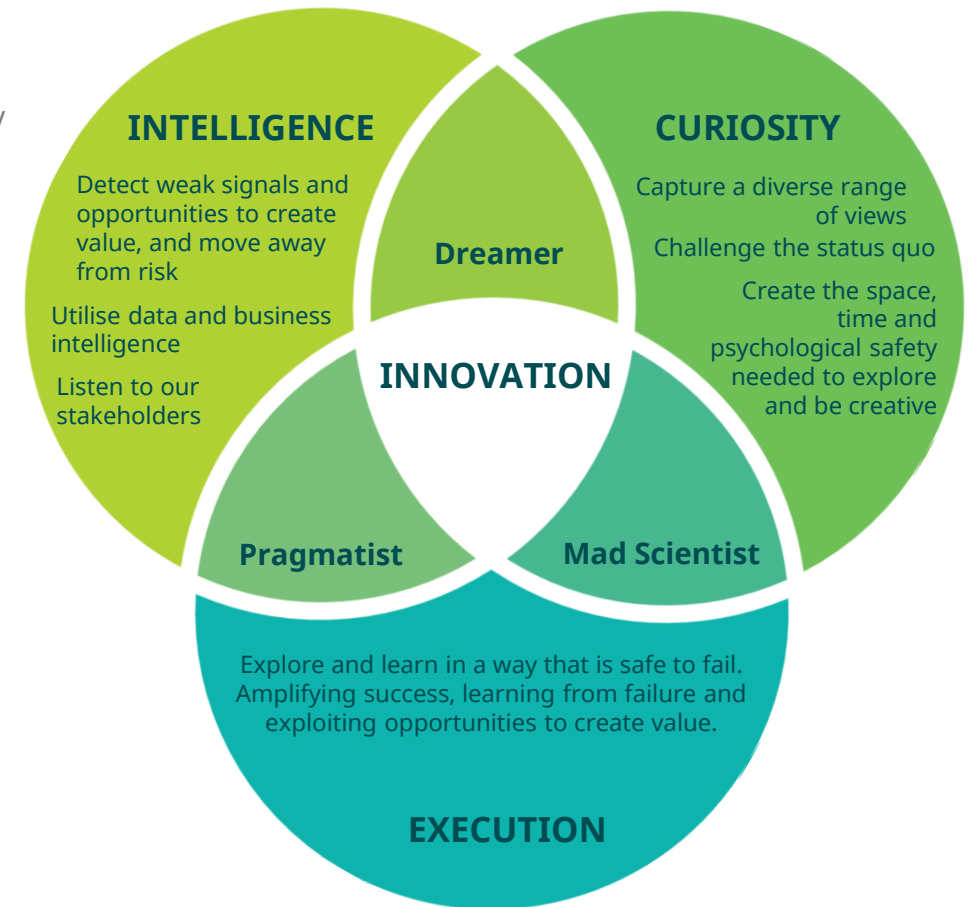
ICE Innovation® is designed to harness our business **intelligence**, natural **curiosity** and our ability to **execute**. When combined these forces create the conditions for innovation to occur.

Intelligence and Curiosity without Execution means we risk getting lost in our imagination. The Dreamer can imagine a better future but lacks the ability or desire to participate in its creation. Frustration can arise if people have innovative ideas but cannot execute on them.

Intelligence and Execution without Curiosity means we rush into problem solving without thinking about the bigger picture. Pragmatism is a good mode of operation when the outcomes are known, and our successful execution relies on efficient and expeditious actions. Many of the day-to-day tasks and asset management projects are focused on pragmatism. The Pragmatist may stifle our ability to explore novel ideas and find innovative solutions.

Curiosity and Execution without Intelligence leads to activity that has little grounding in the needs of today. While we may eventually hit on an innovative idea, The Mad Scientist expends lots of energy and resources creating things of marginal value. We want to avoid this path to innovation as it has many dead ends.

ICE Innovation® is a process of finding a balance of these forces so teams can think and act differently to create the conditions for innovation across Orion and our stakeholders. ICE is about where our energy comes from, not the attributes of individual contributors.



Appendix C: Innovation Practices

Commerce Commission Information Disclosure Requirements

In November 2022, the Commerce Commission introduced information disclosure requirements for EDBs to describe their innovation practices. The objective of these requirements are to ensure stakeholders have better understanding of how EDBs are adapting to the changing environment and technical settings in which they operate, which is especially important given the impact decarbonisation will have on EDBs.

We define innovation as the amplification of successful exploration. Reflecting this, we have shared a broad set of practices, including activity related to the supply of electricity lines services and Orion's strategic purpose in support of and with our customers and communities.

| 17.6 a description of the following: | Covered in section page |
|--|-------------------------|
| 17.6.1 any innovation practices the EDB has planned or undertaken since the last AMP or AMP update was publicly disclosed, including case studies and trials; | 11-18, 35-39 |
| 17.6.2 the EDB's desired outcomes of any innovation practices, and how they may improve outcomes for consumers; | 11-18, 35-39 |
| 17.6.3 how the EDB measures success and makes decisions regarding any innovation practices, including how the EDB decides whether to commence, commercially adopt, or discontinue these practices; | 19-33 |
| 17.6.4 how the EDB's decision-making and innovation practices depend on the work of other companies, including other EDBs and providers of non-network solutions; and | 25, 29 |
| 17.6.5 the types of information the EDB uses to inform or enable any innovation practices, and the EDB's approach to seeking that information. | 23-24, 27, 29 |

Orion

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