

Energy Transition & the Energy Trilemma

Agenda

- 1 | About BusinessNZ Energy Council
- 2 | World Energy Council Tools
- 3 | New Zealand's Energy Trilemma
- 4 | World Energy Transition Radar

Emily Calvert, Senior Policy Advisor



BusinessNZ Energy Council Members



Promoting sustainable development and use of energy for all



Insights tools



Energy Policy Trilemma: policy pathfinding to manage security, equity and sustainability through transition



Energy Issues Monitor: reality check - global, regional, national energy leaders' perspectives on the key challenges



Energy Scenarios: a tool for bigger picture thinking, revealing deeper assumptions and reframing choices and options



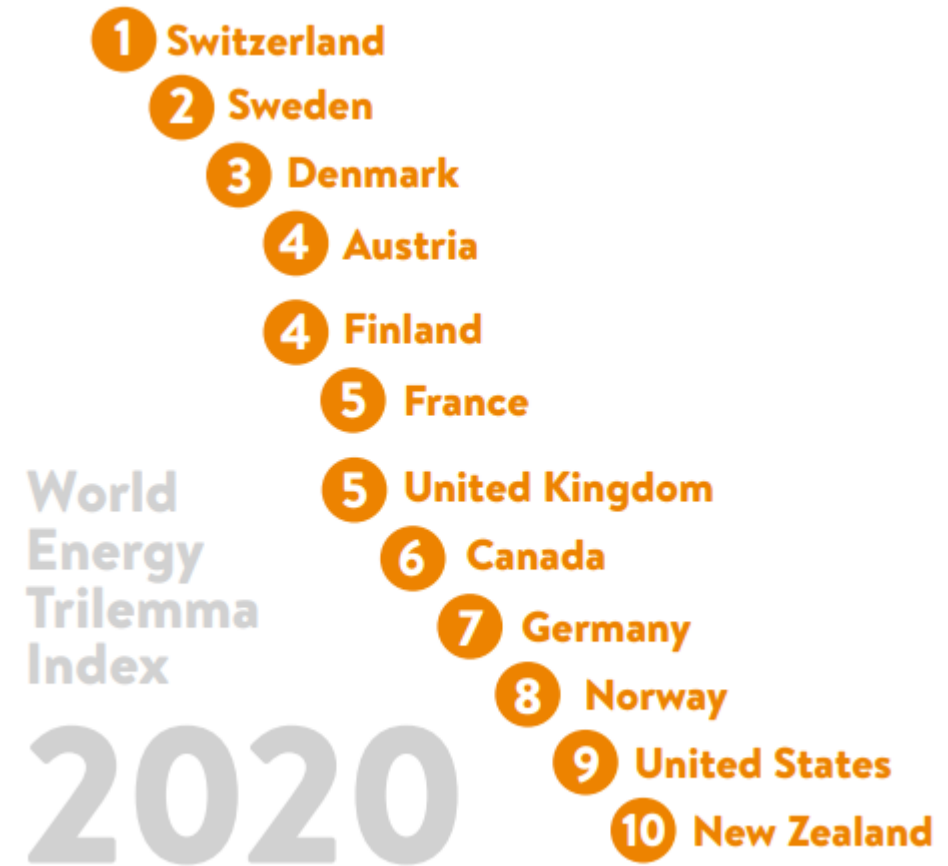
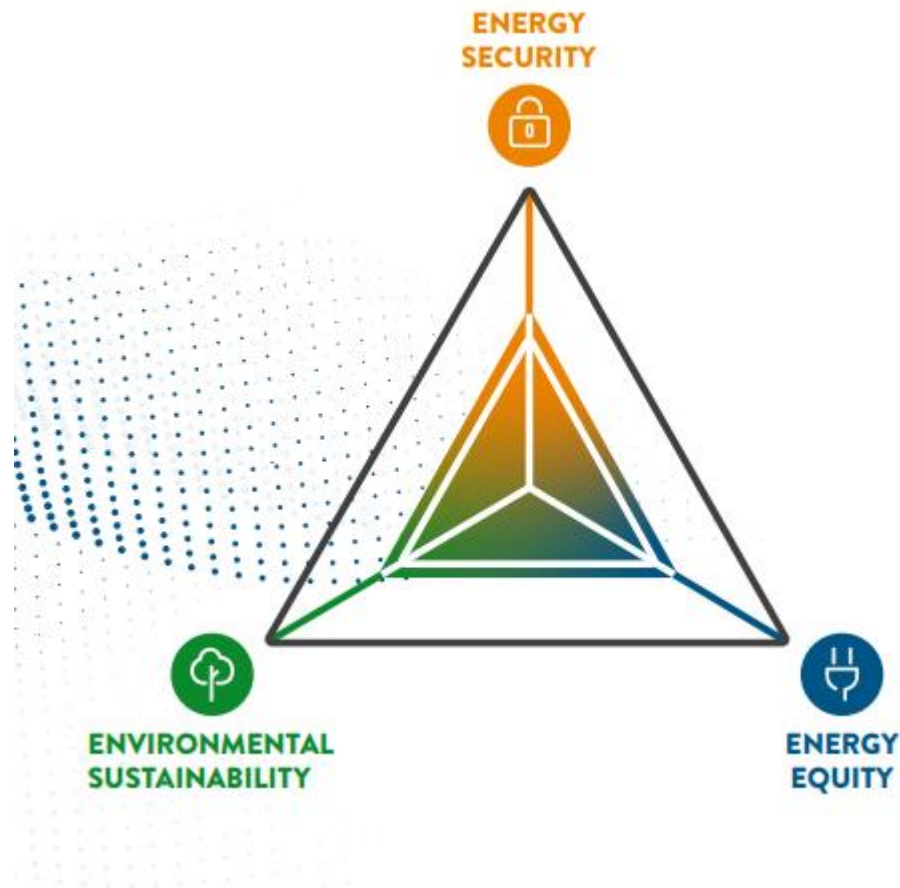
Innovation Insights: digging deeper into disruptive dynamics and moving transition innovation from the margins to mainstream



Dynamic Resilience: better prepare firms and energy systems for new energy shocks, environmental stresses and systemic risks

THE ENERGY TRILEMMA: Energy Security, Energy Equity and Environmental Sustainability

World Energy Trilemma



New Zealand's Energy Trilemma



GRADE



RANK



SCORE

AAA

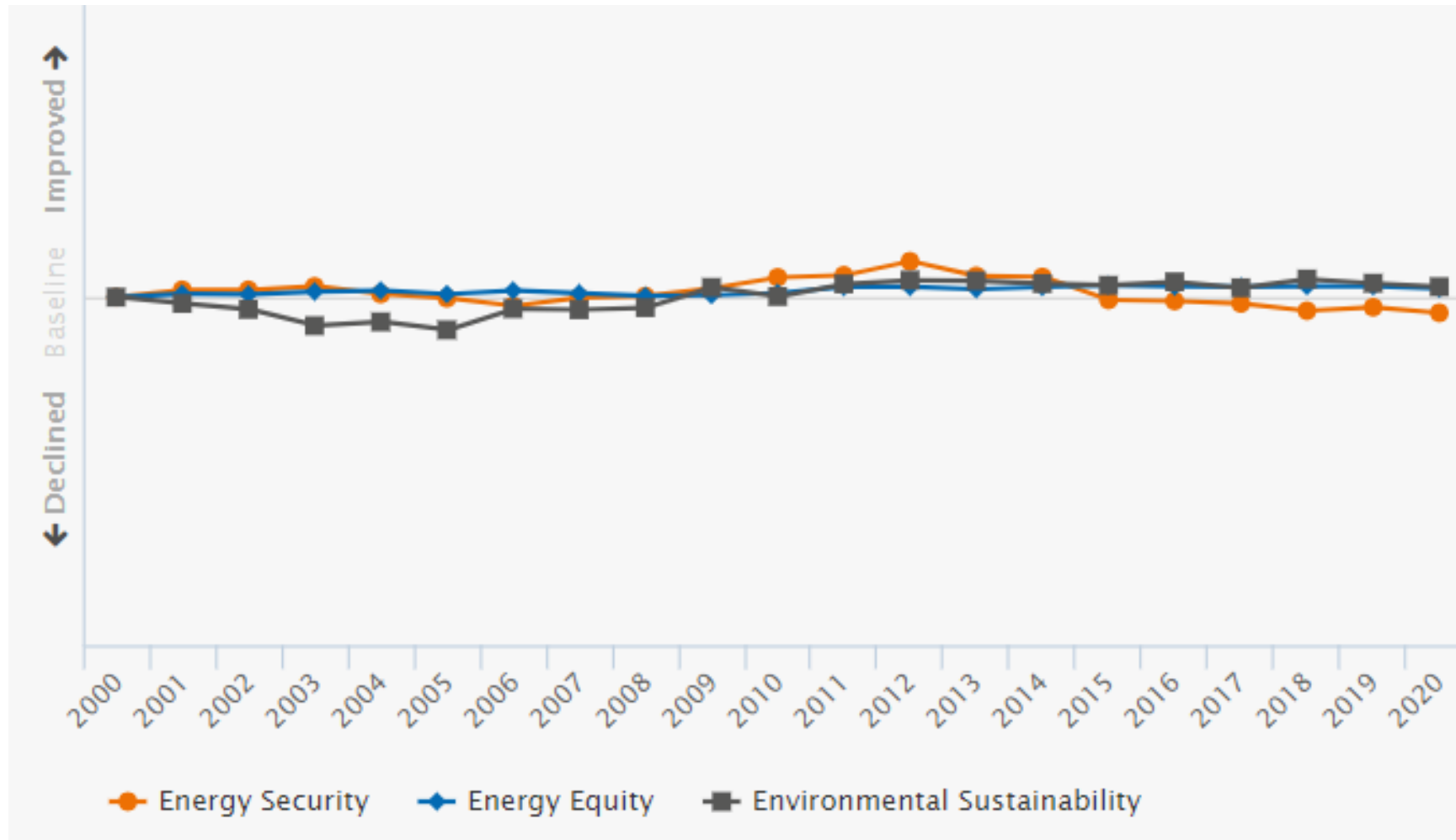
#10

64.9 Security

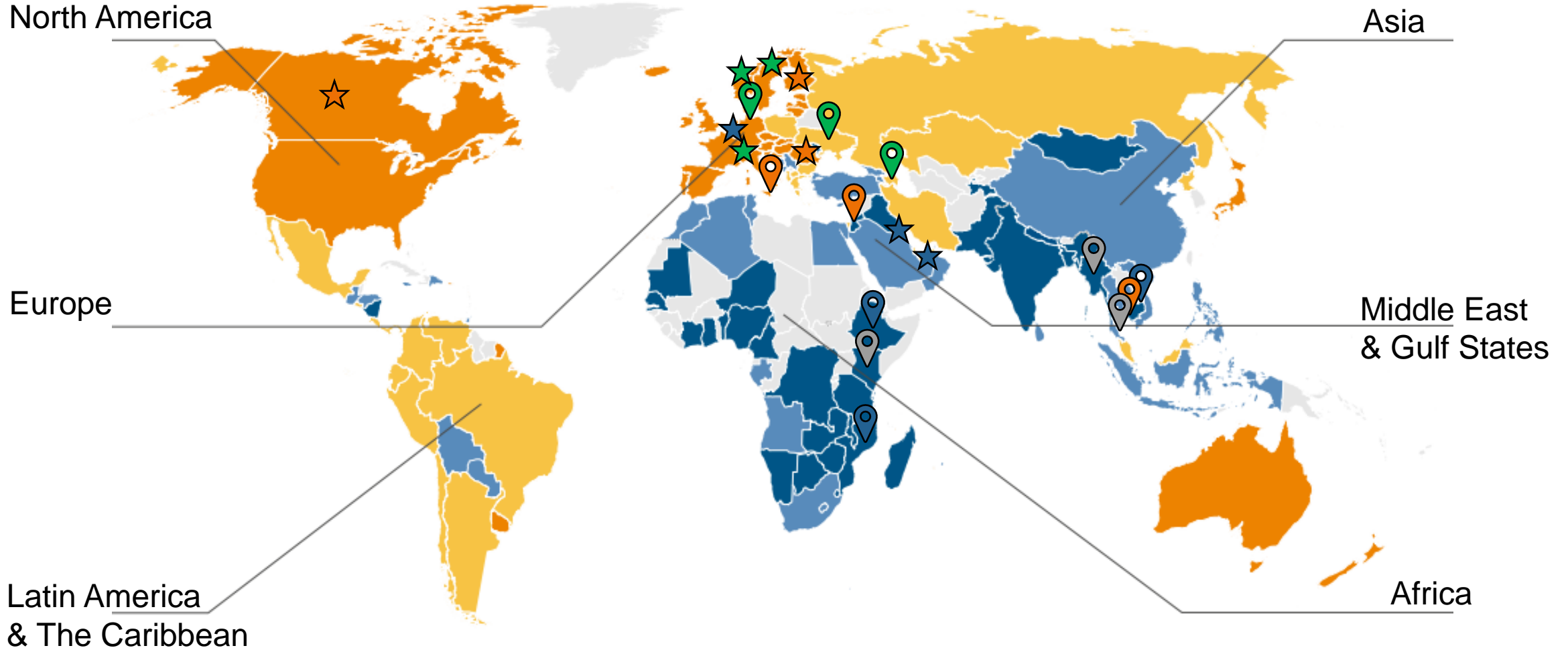
78.9 Sustainability

94.6 Equity

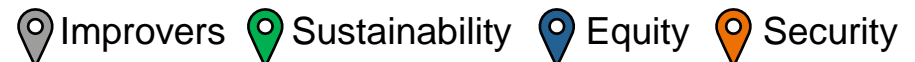
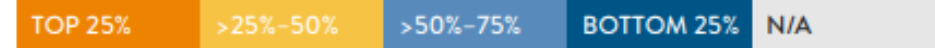
New Zealand's historical performance



2020 World Energy Trilemma



COUNTRY PERFORMANCE

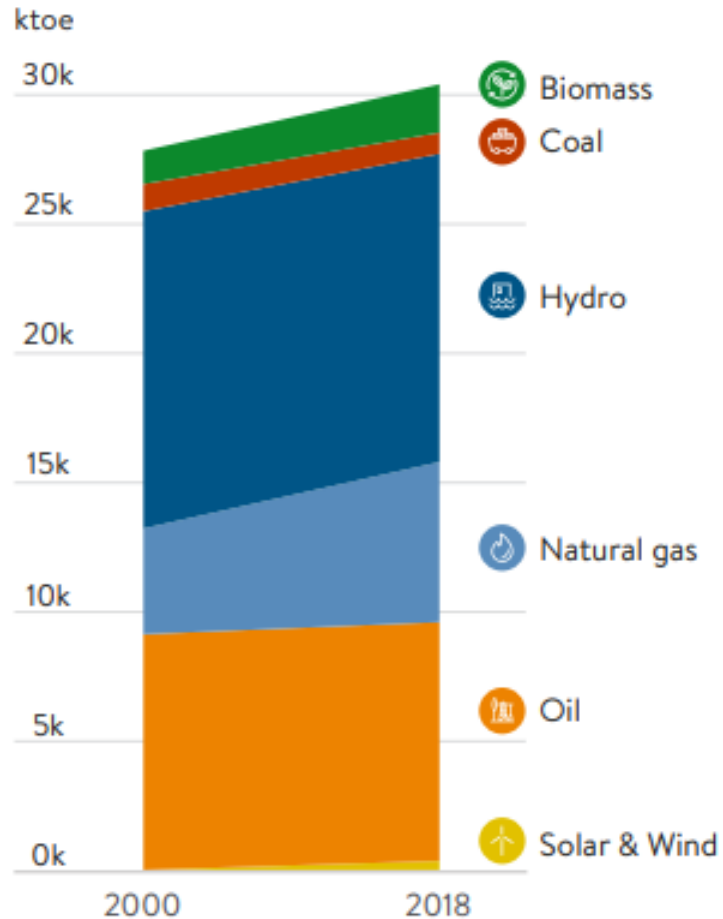


Energy Security: Top Performers

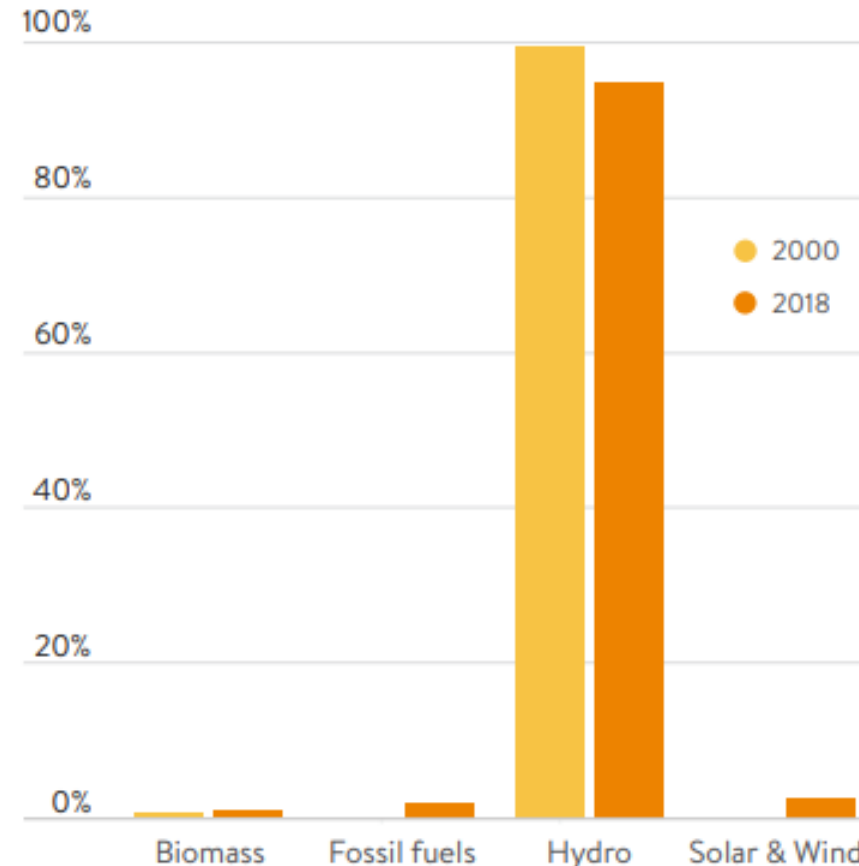


Changes to diversity of electricity generation in top **Security** performers

Case Study: Norway

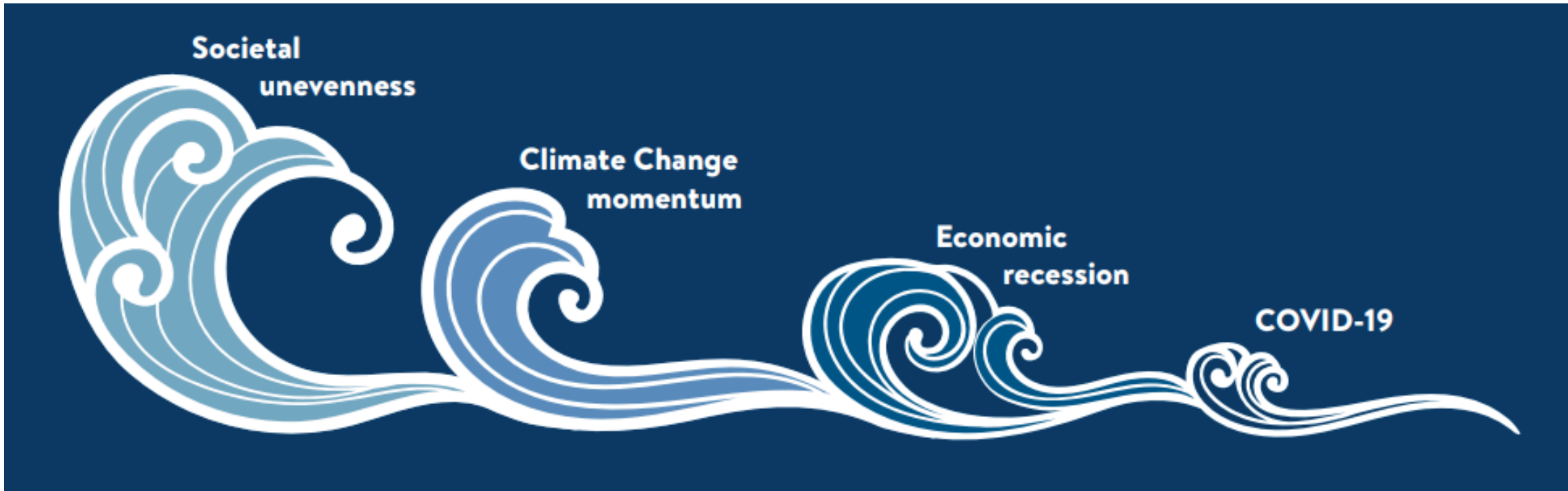


Primary Energy Supply in Norway



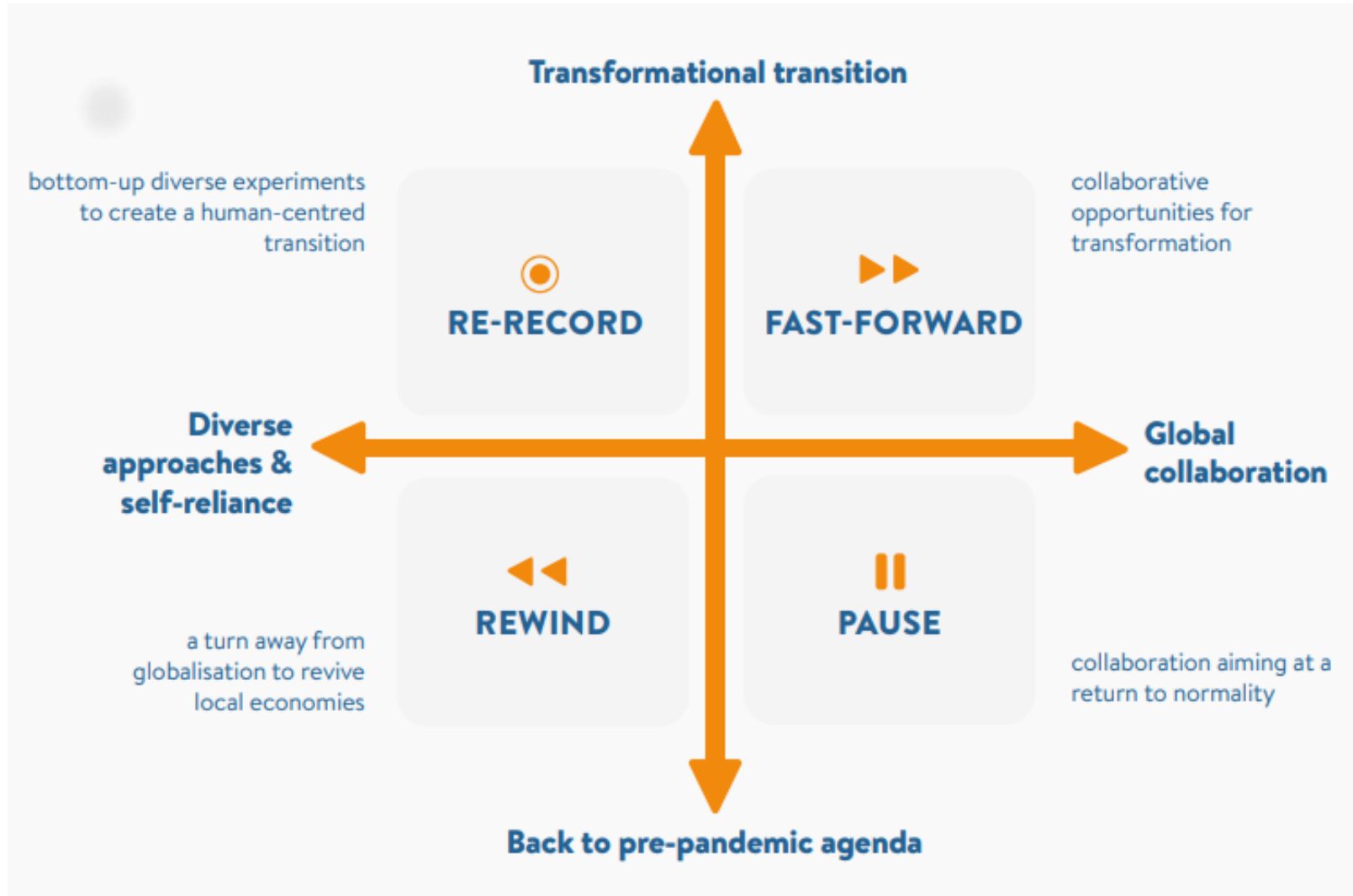
Diversity of Electricity Generation in Norway

ENERGY TRANSITION RADAR: Pause, Rewind, Fast-Forward, Re-Record



COVID-19: A brutal health shock which impacts on pre-existing tensions in energy systems

Future scenarios



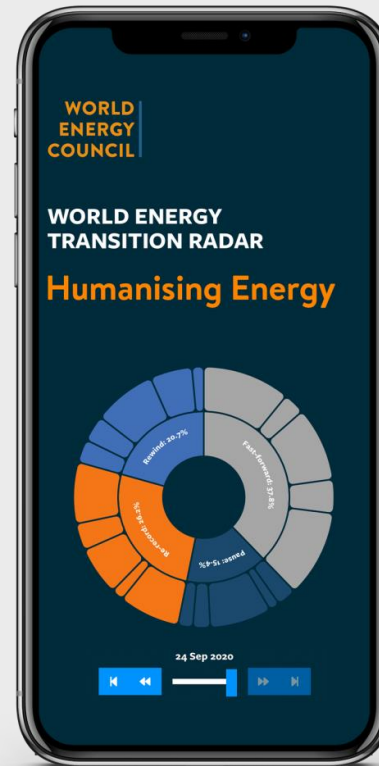
'How to' manage through and recover from crisis

Exchange experiences and equip all energy leaders with tools, deeper insights and practical know-how

Community-wide surveys



World Energy Transition Radar



Scenarios Summit

Role-play live simulation



Covid crisis scenarios (to 2024)



Plausible pathways (up to 2024)

Stress testing and designing post pandemic strategies

Critical uncertainties (medium term)



Ambition
return to pre-pandemic normal vs. transformational transition

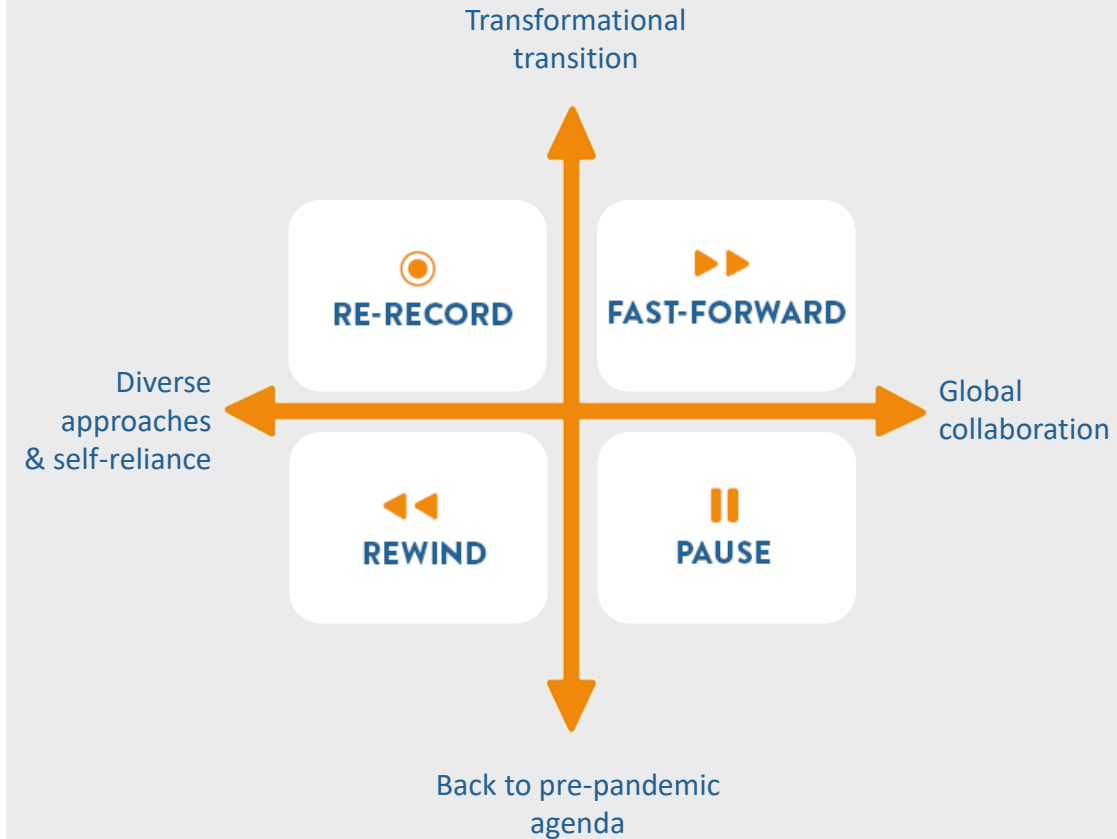


Trust
global collaborative approach vs. diverse approaches with greater self-reliance



Control of the virus
techno/medical-fix vs. behaviour change

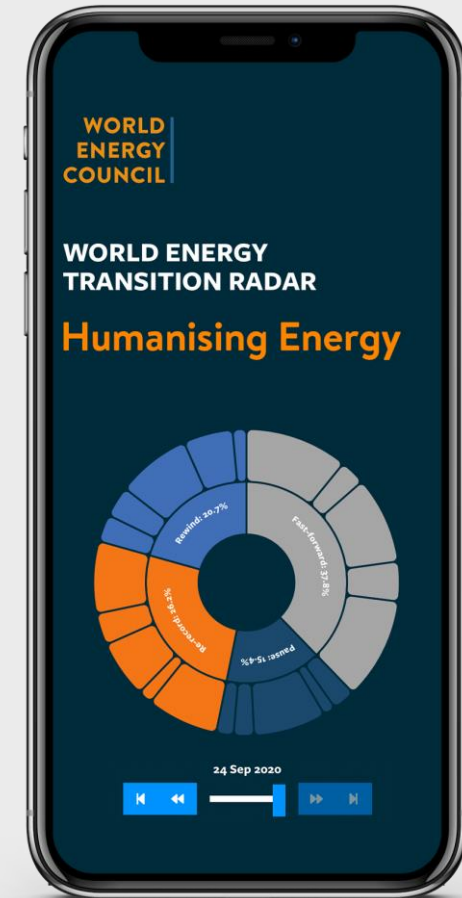
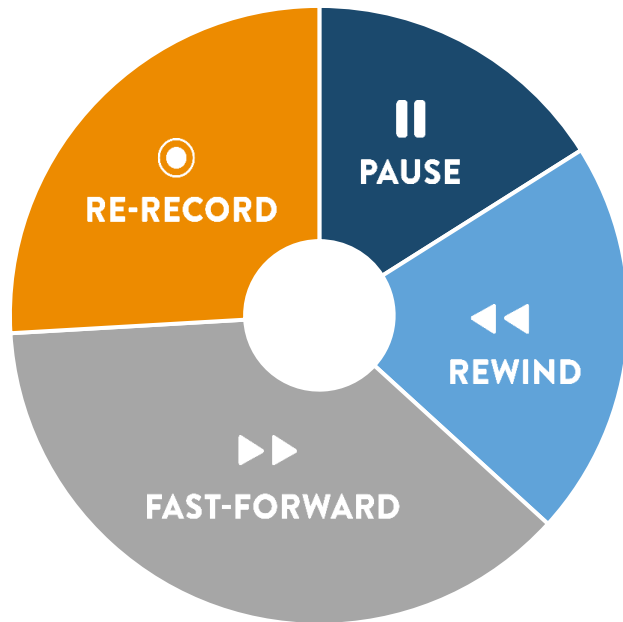
Scenarios framework



World Energy Transition Radar

An interactive tool to detect real time signals of recovery

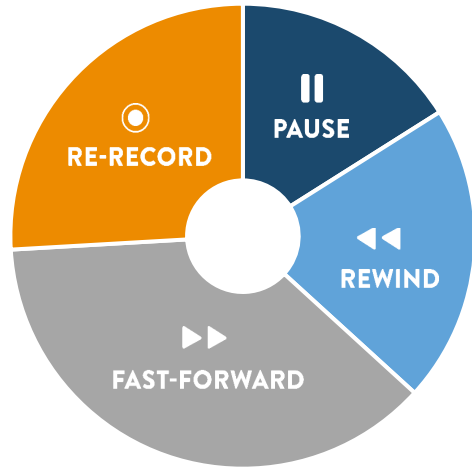
*Global snapshot
(as of 1 November 2020)*



World Energy Transition Radar

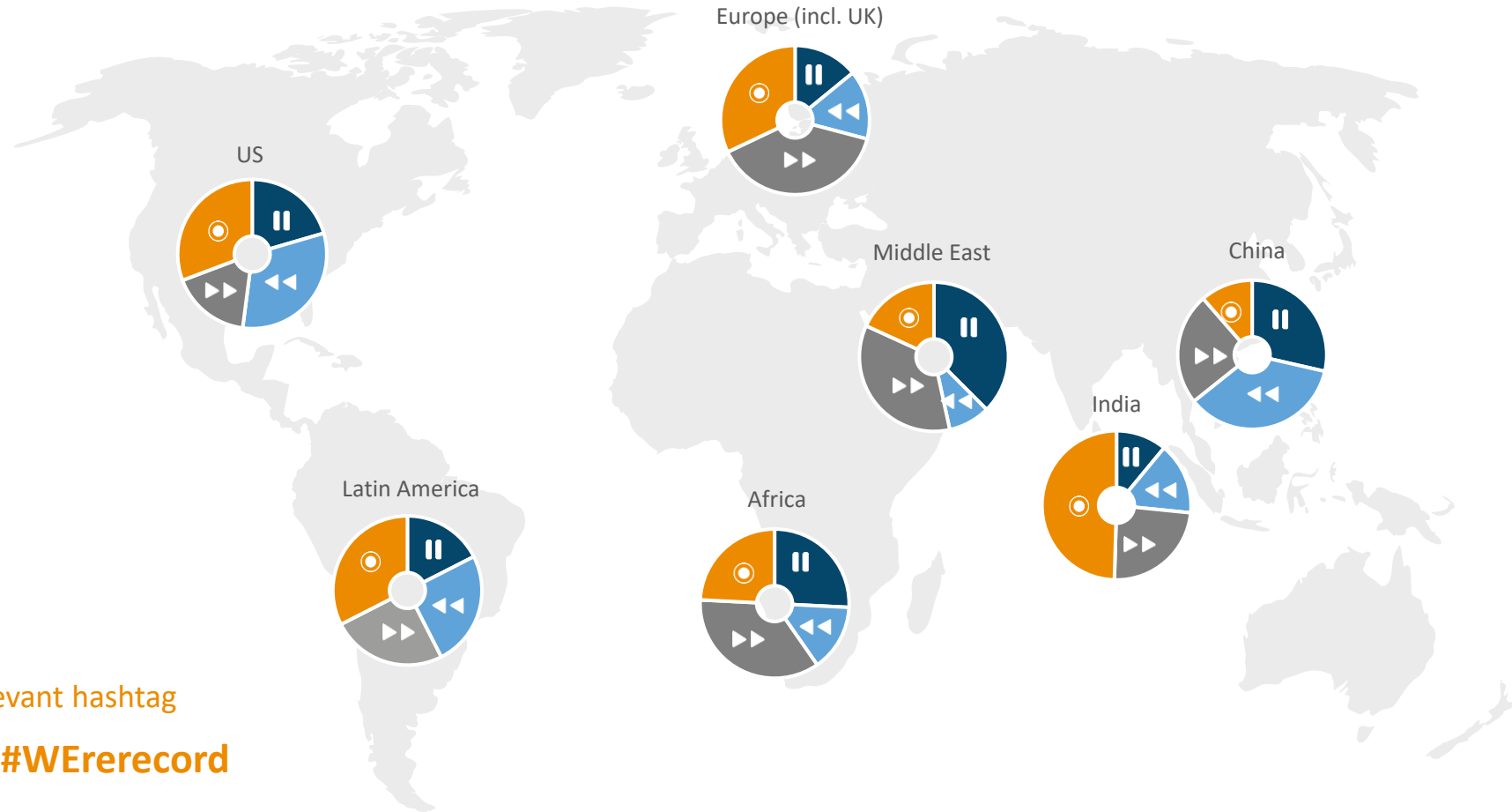
Over 2,900 real-time signals of recovery detected so far by our worldwide community

*Global snapshot
(as of 1 November 2020)*



*Regional geographies snapshots
(as of 1 November 2020)*

**regional signals represents approx.. 45% of all signals*

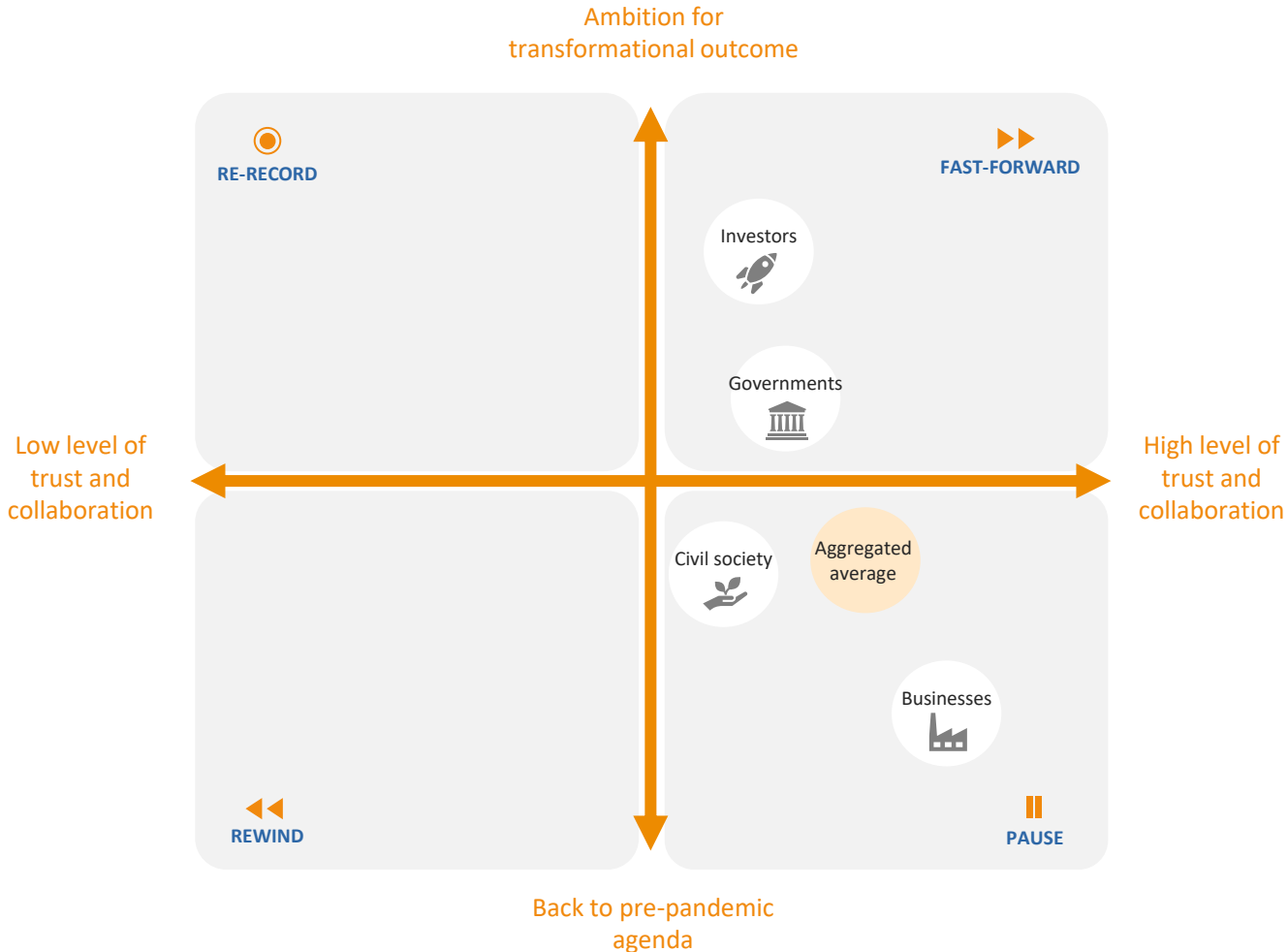


To contribute to signals scanning
share signals in your social media and add relevant hashtag

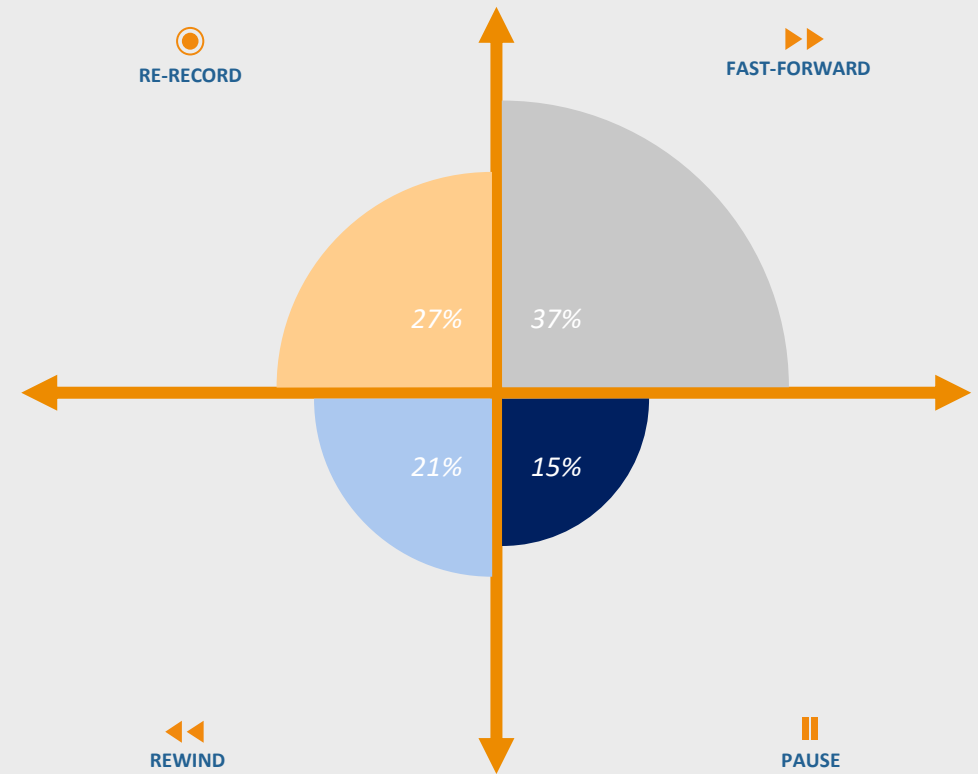
#WEpause, #WErewind, #WEforward, #WErerecord

Scenario Summit – role-play live simulation

How collective actions impact post-Covid future? Snapshot of Summit (8 October, Round 2)



What do real-time signals tell us? Global snapshot of the World Energy Transition Radar



For more information

- 1** Read the full [World Energy Trilemma Index](#) report
Check out all the [rankings and country profiles](#) online
- 2** Check out the [Energy Transition Radar](#) dashboard and tag a story
Watch out for the latest [Energy Issues Map](#) results
- 3** Sign up for our next event An Energy Outlook to 2050 with bp's Chief US Economist Michel Cohen
Keep an eye out for our [Energy Scenarios](#) update early next year

Summary

- 1 | About BusinessNZ Energy Council
- 2 | World Energy Council Tools
- 3 | New Zealand's Energy Trilemma
- 4 | World Energy Transition Radar

QUESTIONS?