

**WORLD
ENERGY
COUNCIL**

BusinessNZ
Energy Council

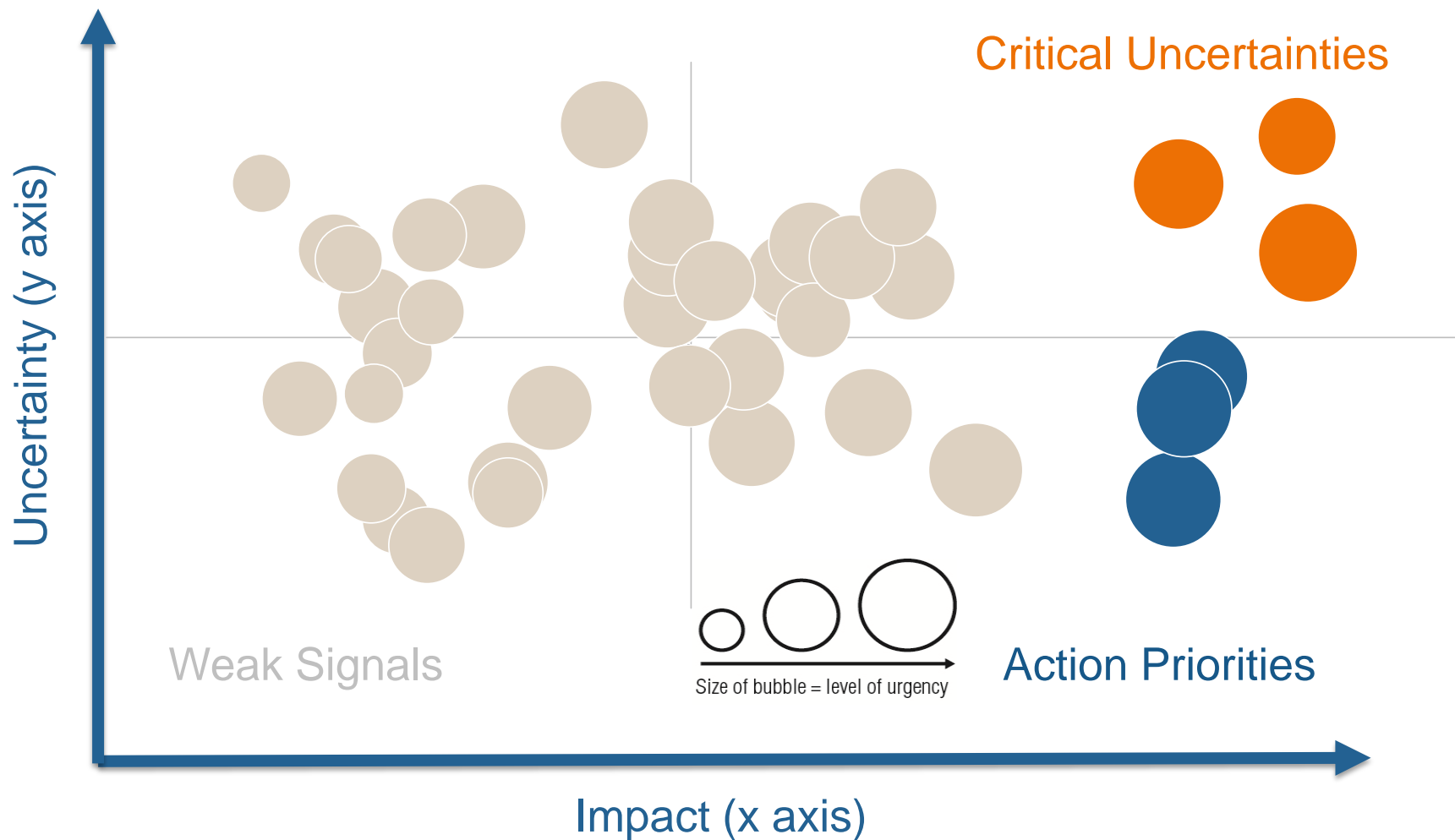
World Energy Issues Monitor 2018

New Zealand

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How to read the Issues Monitor?



How to read the Issues Monitor?

Critical uncertainties: Issues with high uncertainty and high impact (in the top-right quadrant) are the 'critical uncertainties' with no clear path of action which keep energy leaders most awake at night. These issues need to be part of the energy leaders' dialogue and scenario analysis.

→ **What keeps energy leaders awake at night?**

Action priorities: The issues in the high-impact and low-uncertainty space are those which keep energy leaders most busy (bottom-right, 'action issues').

→ **What keeps energy leaders busy at work?**

Weak signals: The low-impact and low-uncertainty issues (bottom-left quadrant) include those of perceived lesser importance or those that are still not fully understood and in need of further investigation.

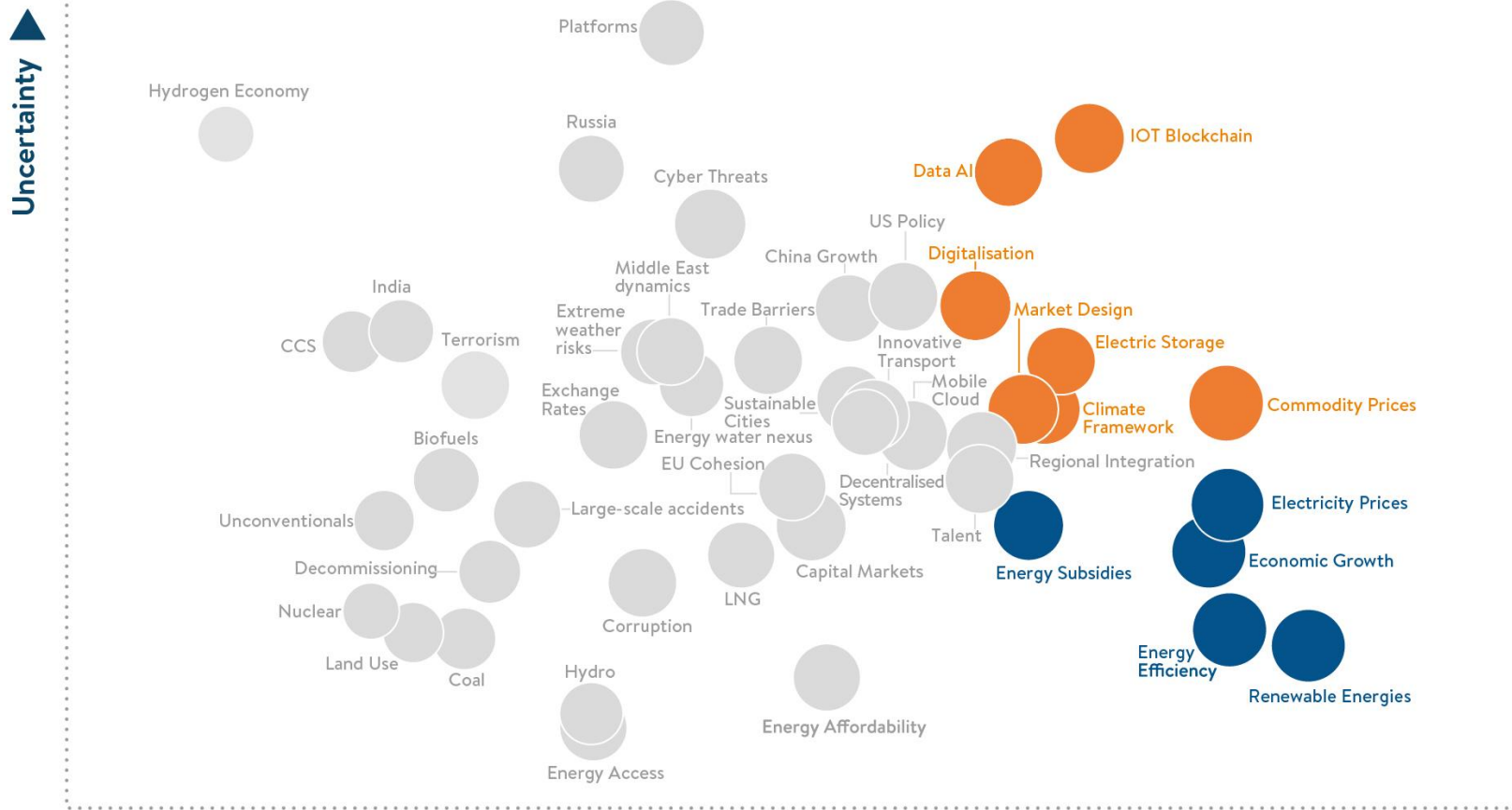
*Survey responses are translated into issue monitors with the three assessed dimensions: the **impact** of an issue on the energy sector – this forms the x axis; the degree of **uncertainty** related to its impact – this forms y axis; the **urgency** with which we need to address the specific issue – represented by the proportional size of the issue bubble where a larger size corresponds to a higher degree of urgency.*

Section 1

The World

World Energy Issues Monitor 2018

Global



World Energy Issues Monitor 2018 - Global

Impact ►

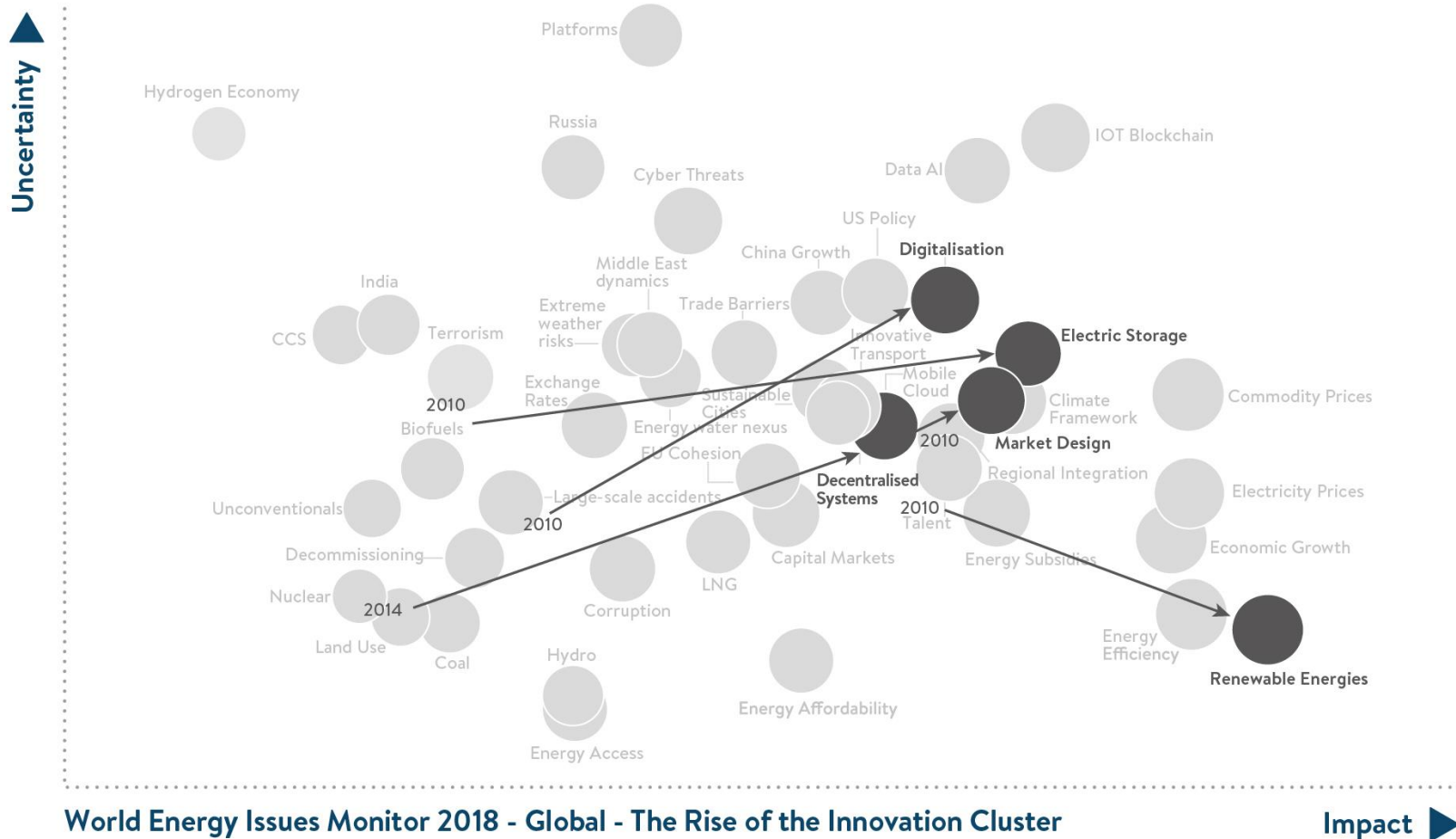
- Critical uncertainties: what keeps energy leaders awake at night
- Action priorities: what keeps energy leaders busy at work



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Global – The Rise of the Innovation Cluster



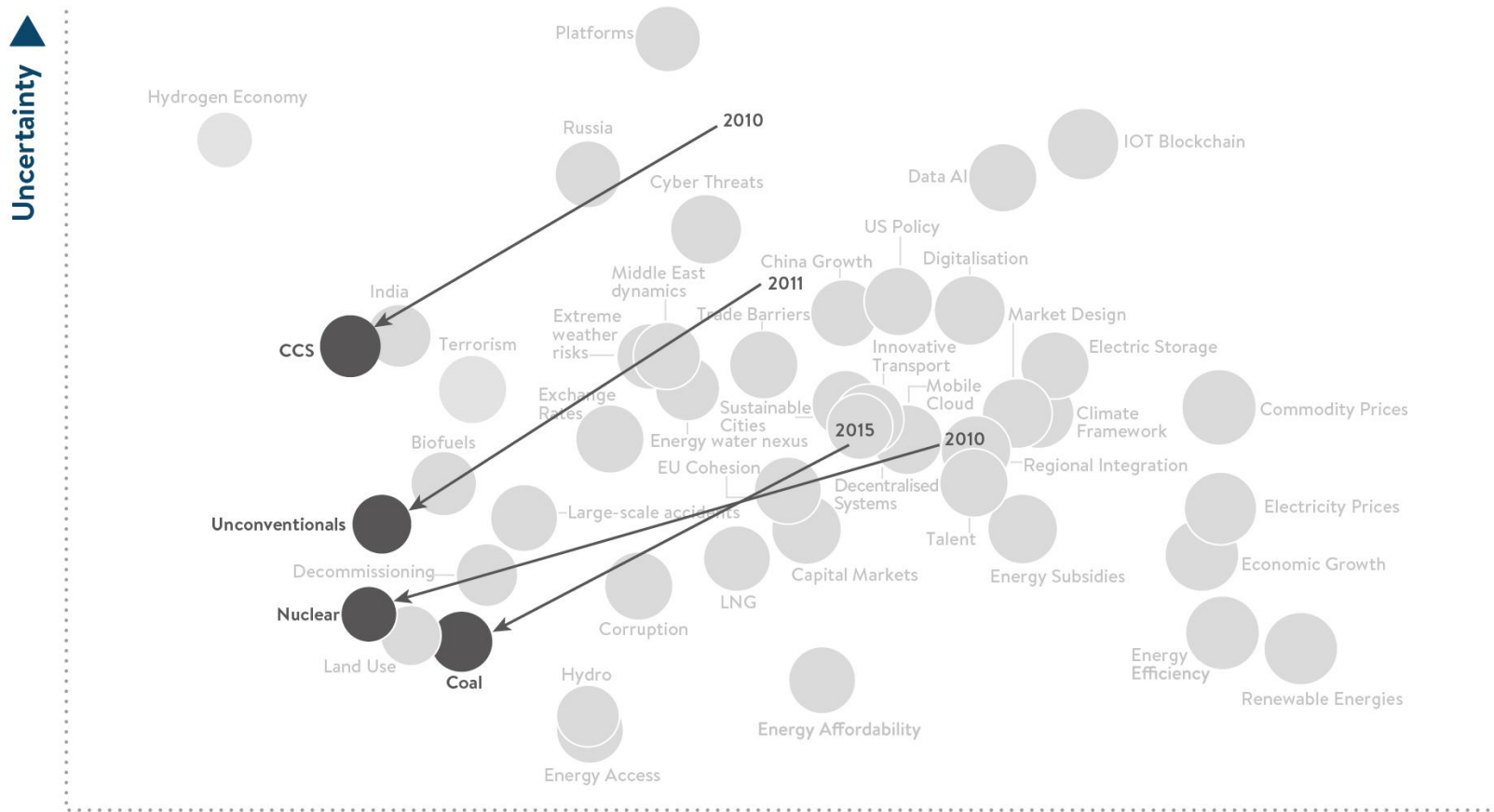
● Timetracking of selected issues from 2010 to 2017

Less urgent ○○○ More urgent

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Global – Centralised Technologies Lose Out



World Energy Issues Monitor 2018 - Global - Centralised Technologies Lose Out

Impact ►

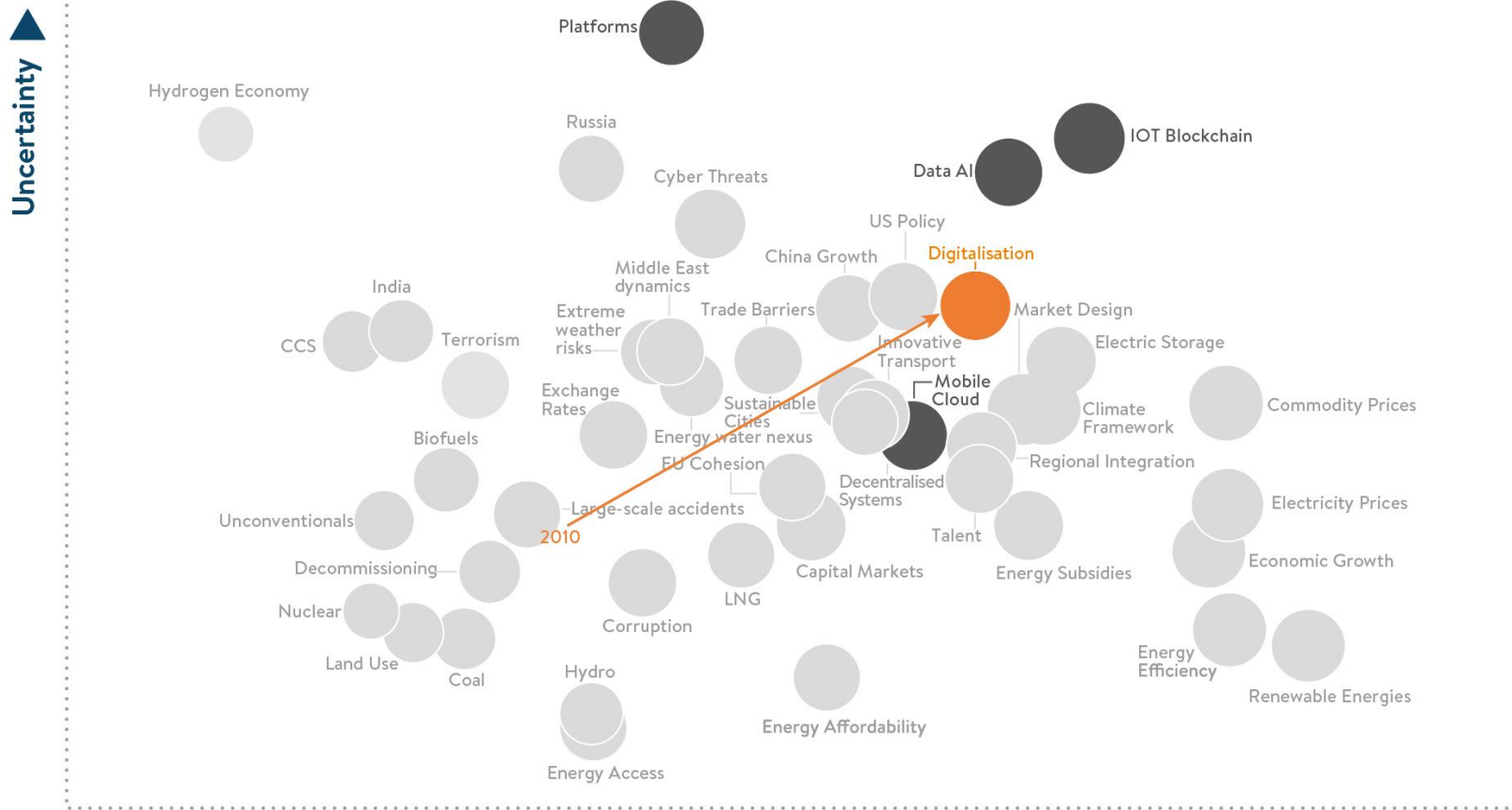
● Timetracking of selected issues from 2010 to 2017

Less urgent ○○○ More urgent

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World Energy Issues Monitor 2018

Global – Digitalisation



World Energy Issues Monitor 2018 - Digitalisation

Impact ►

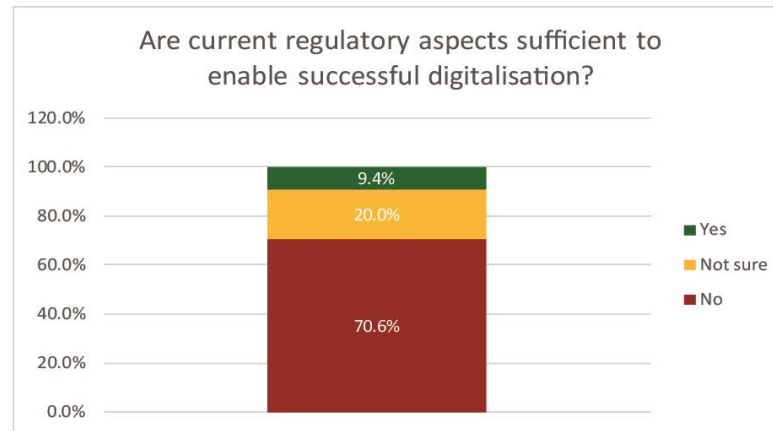
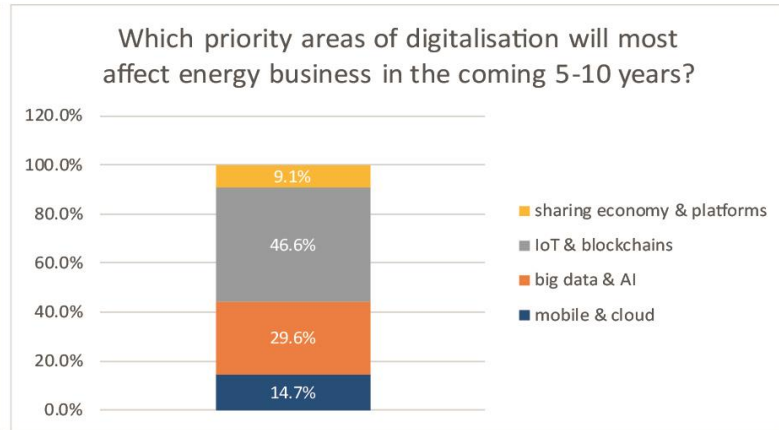
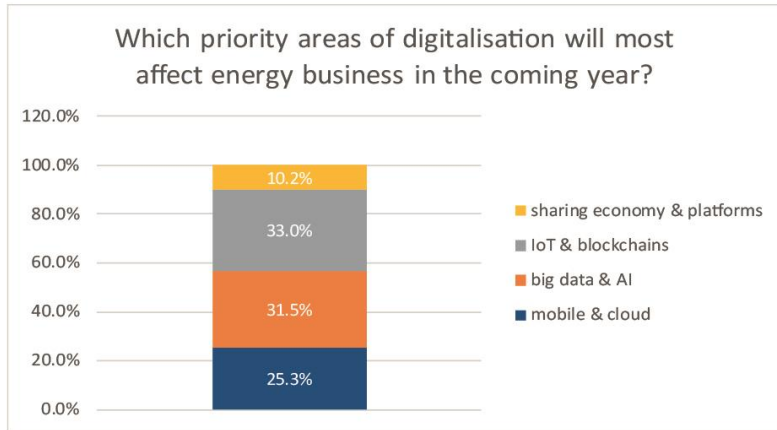
- Digitalisation: Global
- Digitalisation deep-dive issues: Global



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World Energy Issues Monitor 2018

Global – Digitalisation



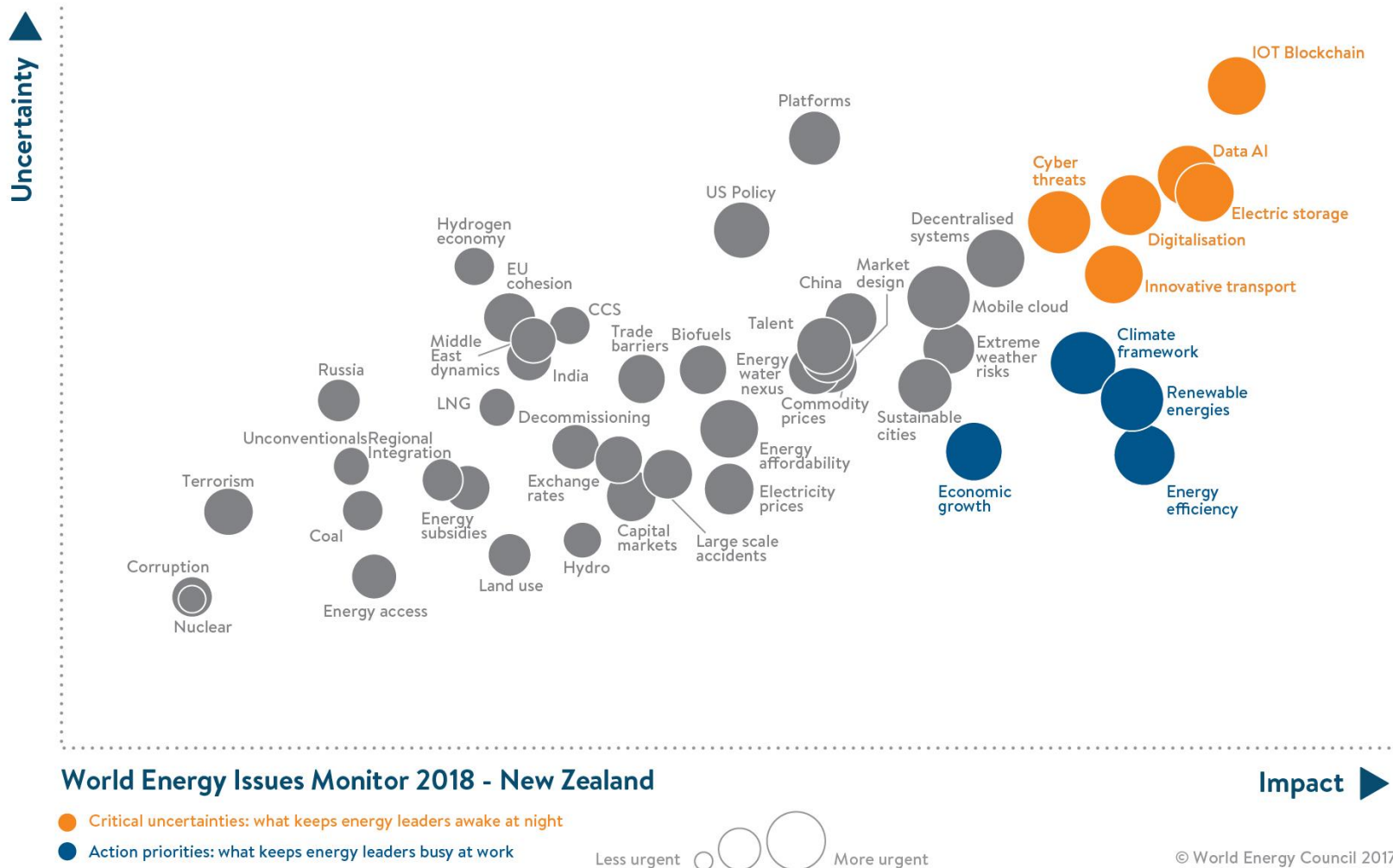
Section 2

New Zealand

Critical Uncertainties & Action Priorities

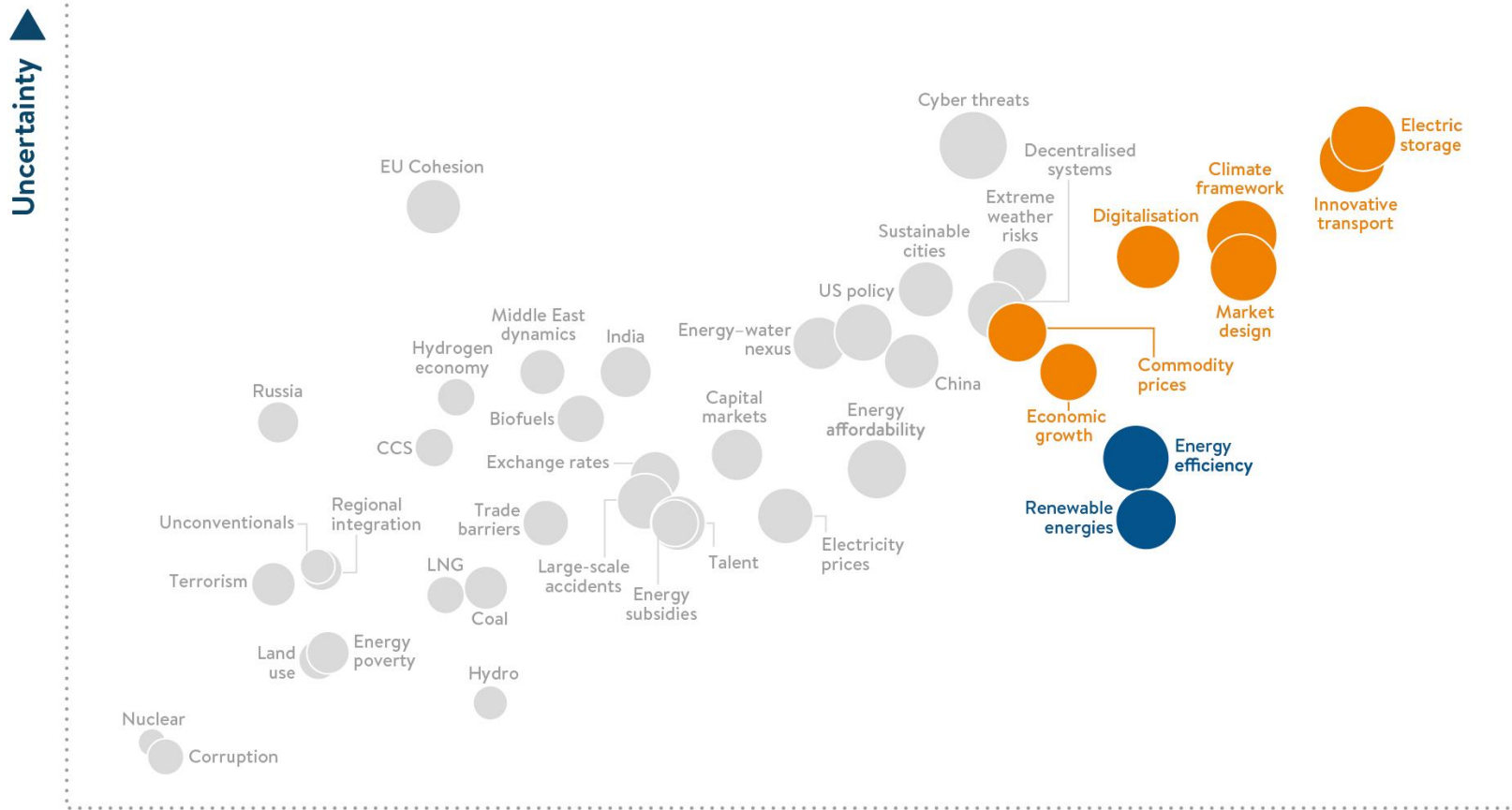
World Energy Issues Monitor 2018

New Zealand – this year



World Energy Issues Monitor 2017

New Zealand – last year



World Energy Issues Monitor 2017 - New Zealand

Impact ►

- Critical uncertainties: what keeps energy leaders awake at night
- Action priorities: what keeps energy leaders busy at work

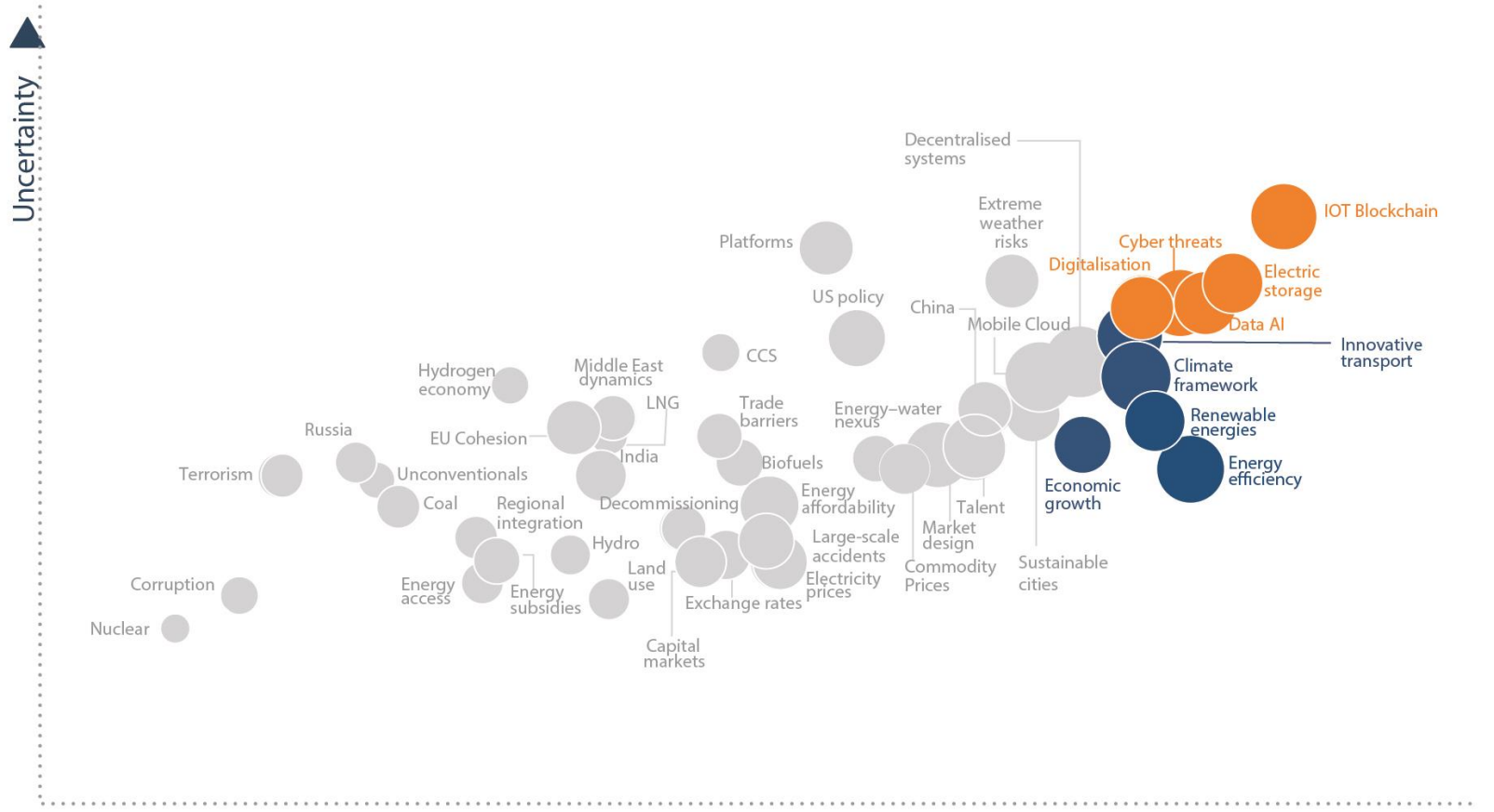


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Section 3
New Zealand
Public & Private Sector

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New Zealand – Private Sector



World Energy Issues Monitor - New Zealand Private Sector

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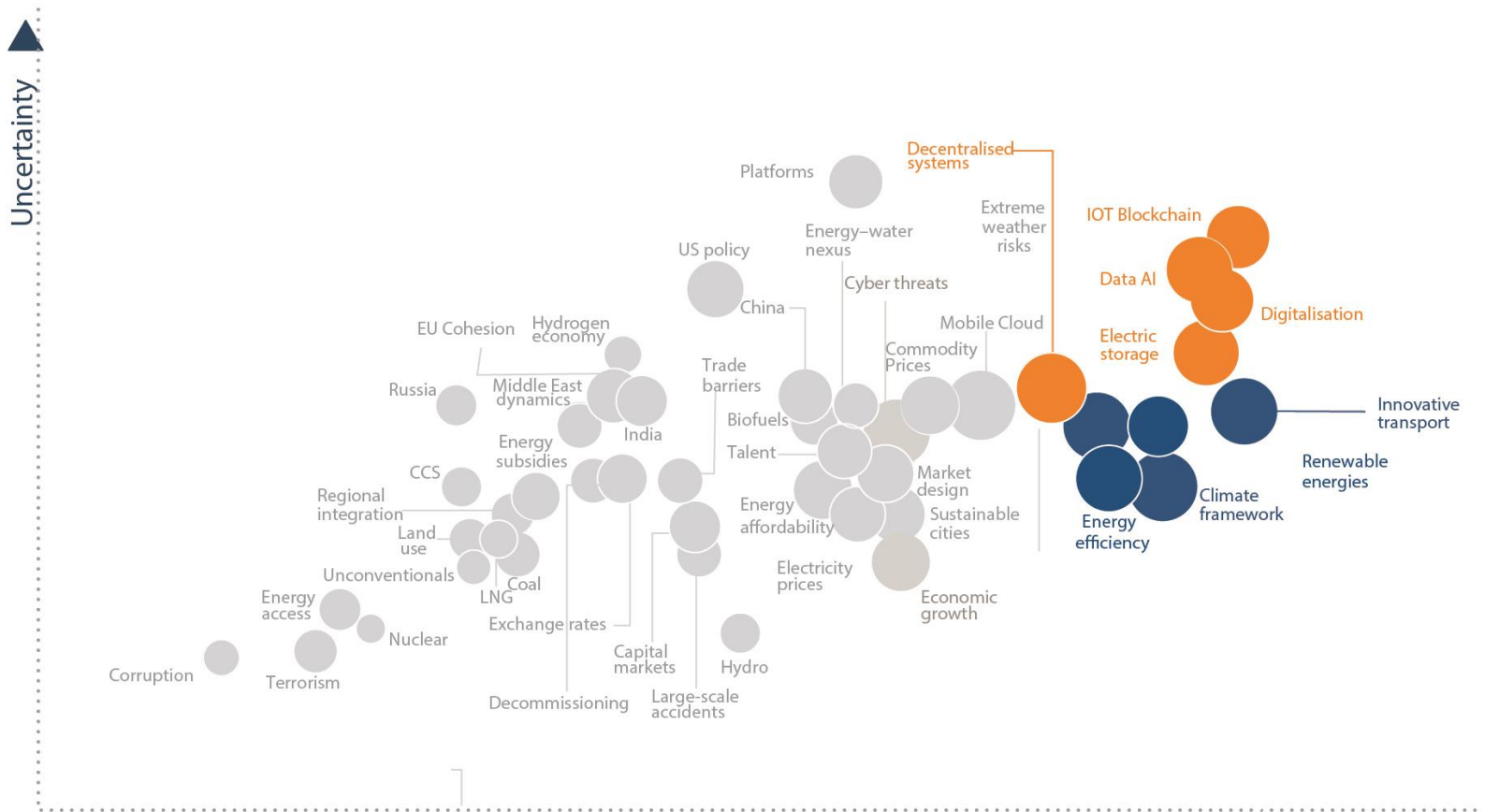
● Critical uncertainties: what keeps energy leaders awake at night

● Action priorities: what keeps energy leaders busy at work

Less urgent ○○○ More urgent

World Energy Issues Monitor 2018

New Zealand – Public Sector



World Energy Issues Monitor - New Zealand Public Sector

Impact ►

● Critical uncertainties: what keeps energy leaders awake at night

● Action priorities: what keeps energy leaders busy at work



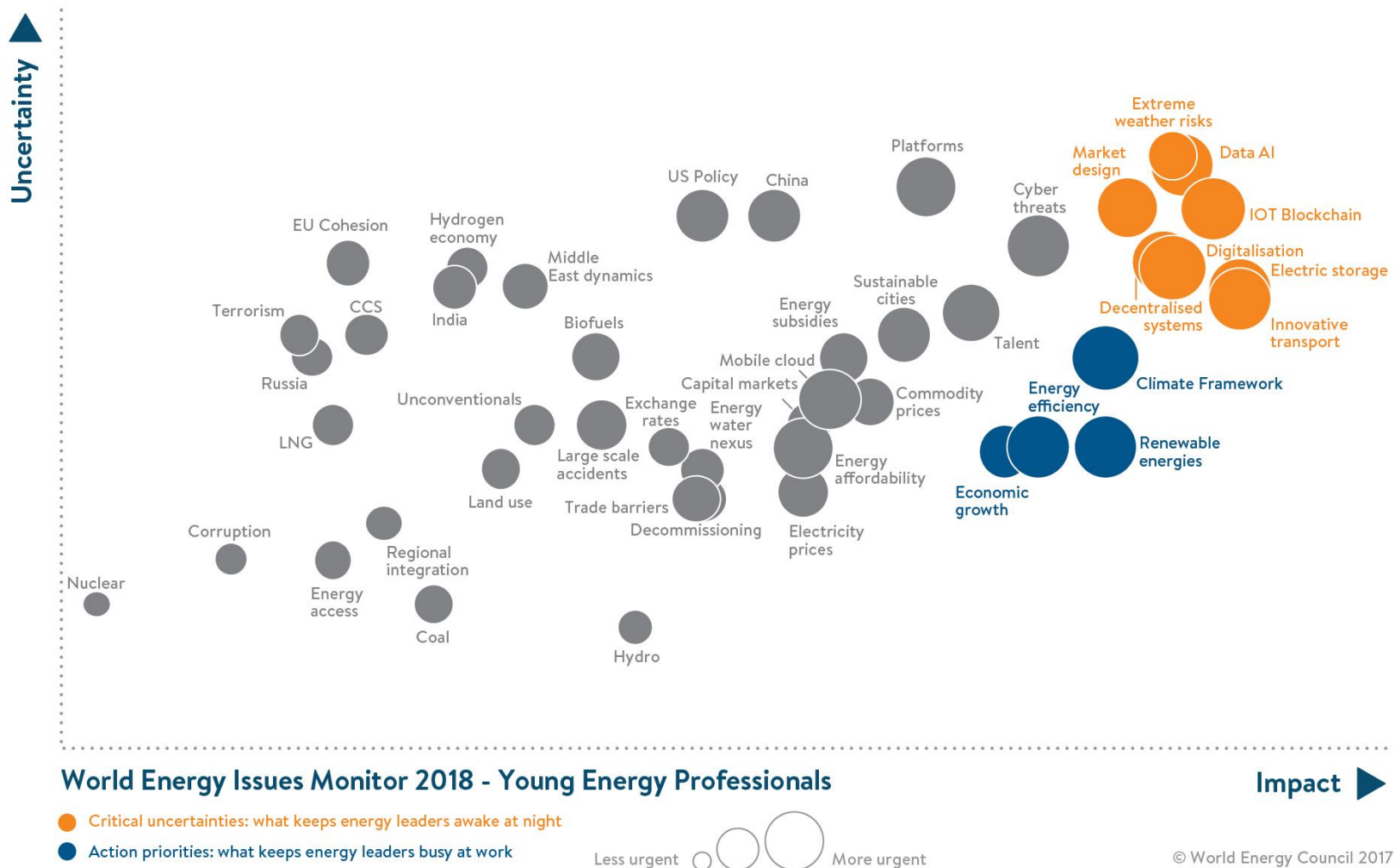
Section 4

New Zealand

Young Energy Professionals

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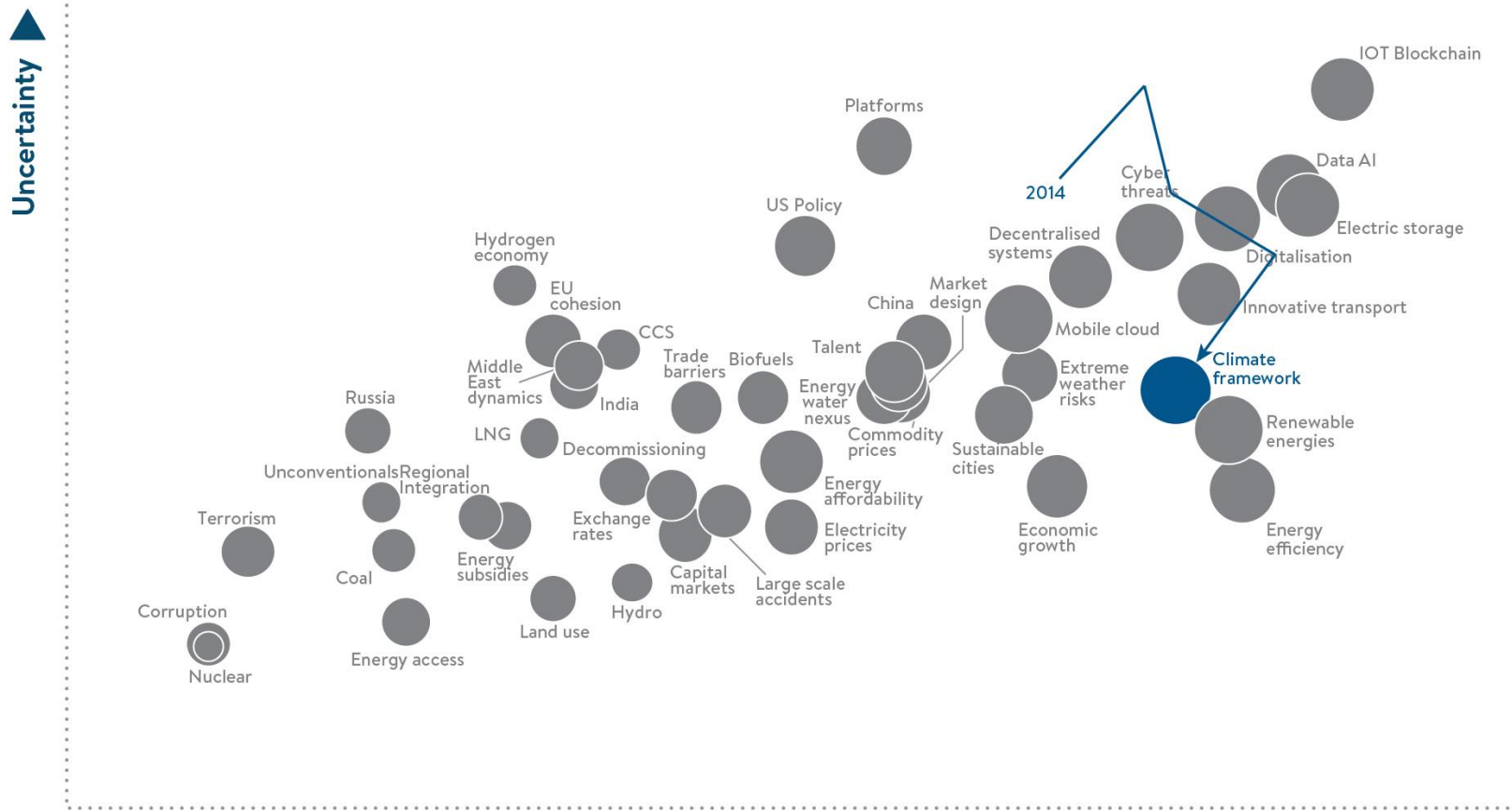
New Zealand – Young Energy Professionals



Section 5
New Zealand
Time-tracking

World Energy Issues Monitor 2018

New Zealand – Climate Frameworks



World Energy Issues Monitor 2018 - New Zealand - Climate Framework

Impact ►

● Climate Framework: Time tracking from 2014 to 2018

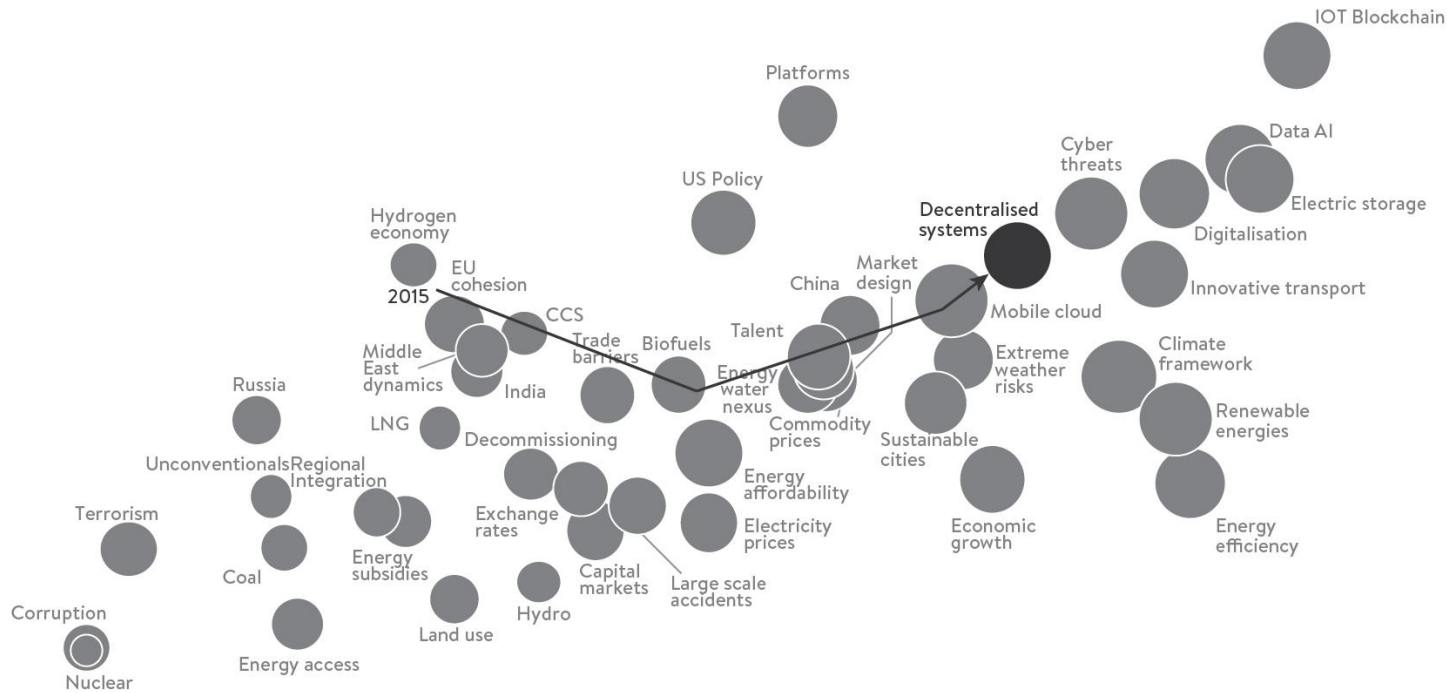
Less urgent ○○○ More urgent

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New Zealand – Decentralised Systems

▲
Uncertainty



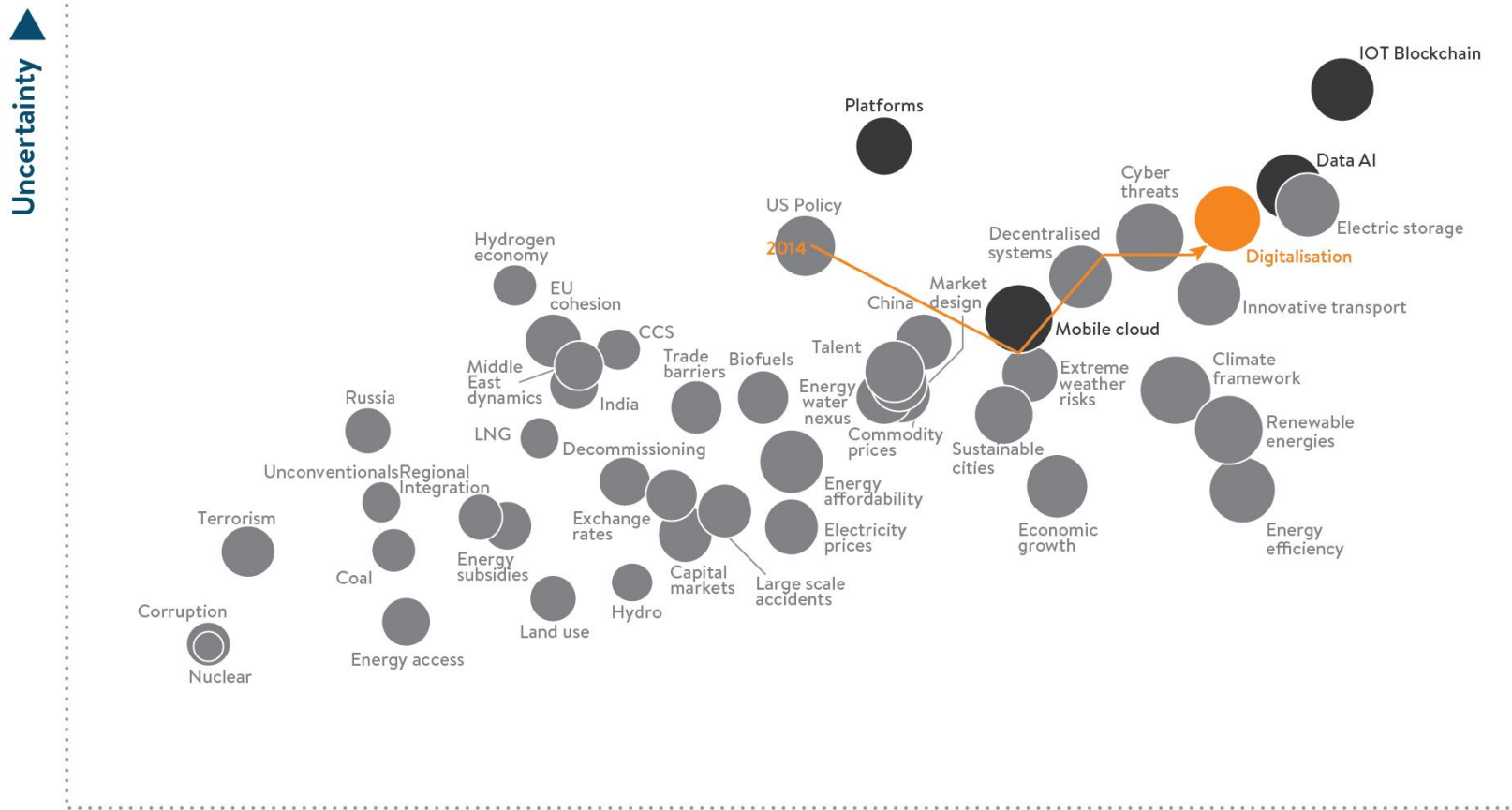
World Energy Issues Monitor 2018 - New Zealand - Decentralised Systems

Impact ►



World Energy Issues Monitor 2018

New Zealand – Digitalisation



World Energy Issues Monitor 2018 - New Zealand - Digitalisation

Impact ►

● Digitalisation: Time tracking from 2014 to 2018

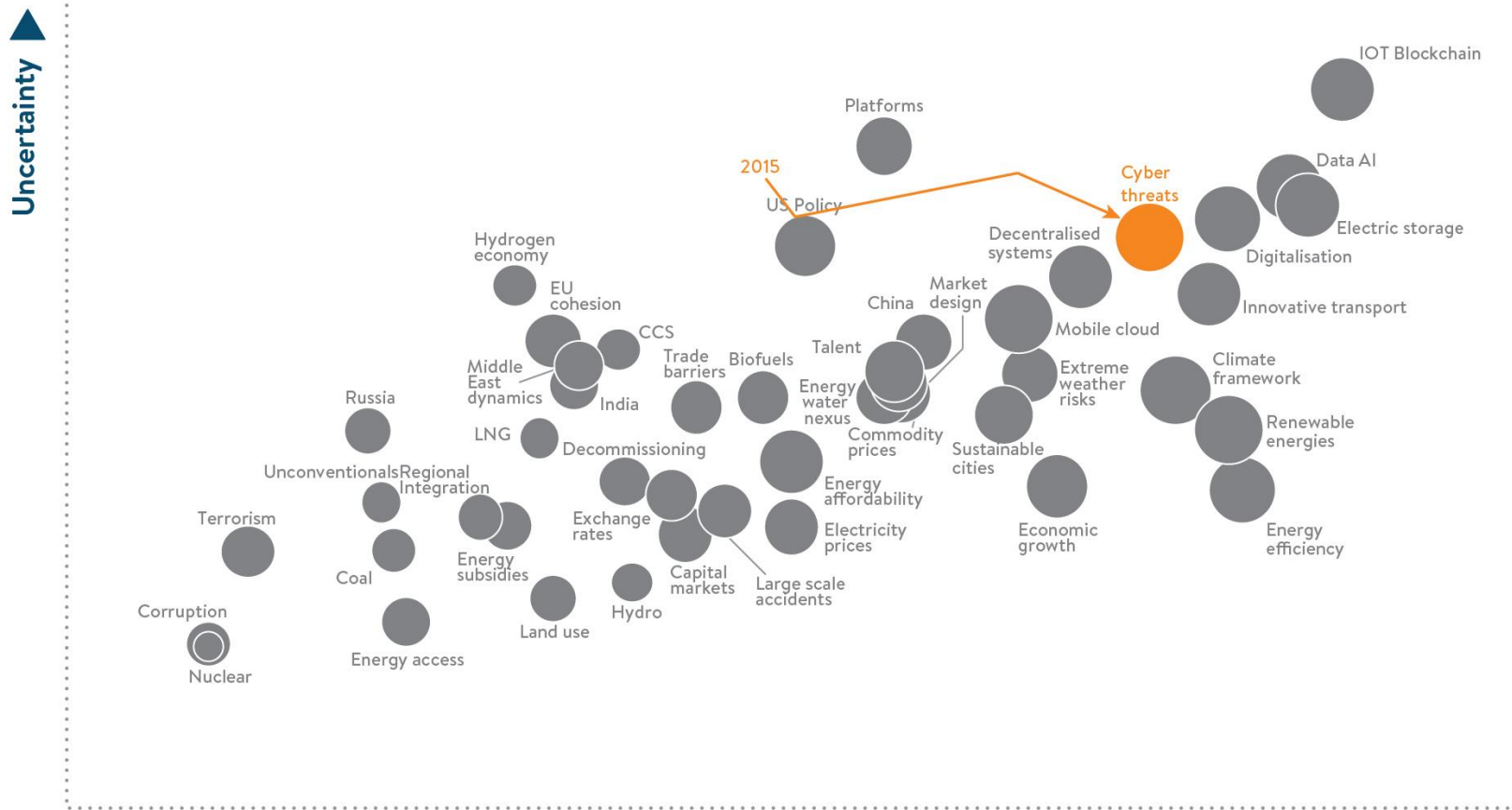
● Associated issues around digitalisation

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New Zealand – Cyber Threats



World Energy Issues Monitor 2018 - New Zealand - Cyber Threats

Impact ►

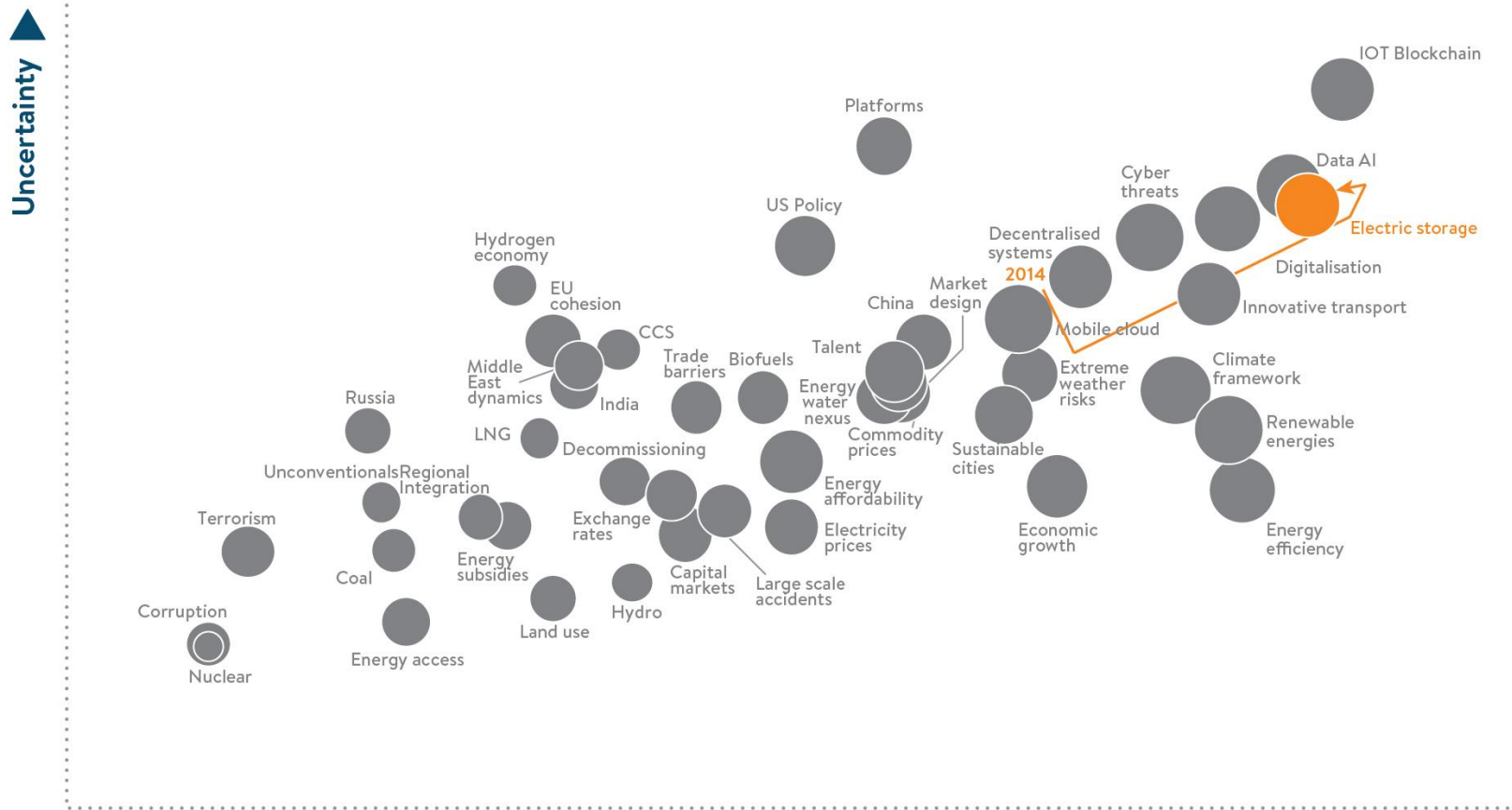
● Cyber Threats: Time tracking from 2015 to 2018



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New Zealand – Electric Storage



World Energy Issues Monitor 2018 - New Zealand - Electric Storage

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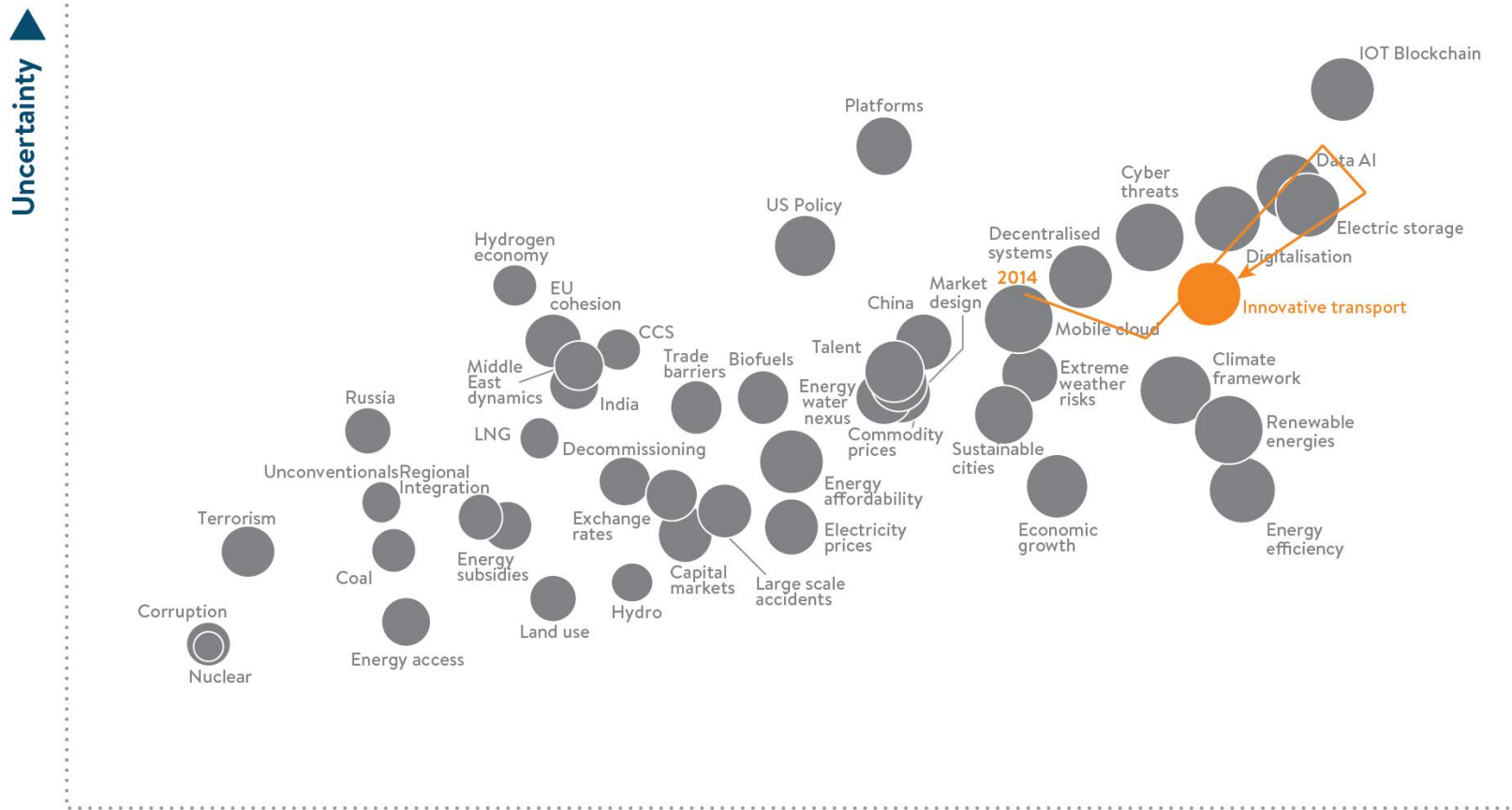
● Electric Storage: Time tracking from 2014 to 2018

Less urgent ○○○ More urgent

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New Zealand – Innovative Transport



World Energy Issues Monitor 2018 - New Zealand - Innovative Transport

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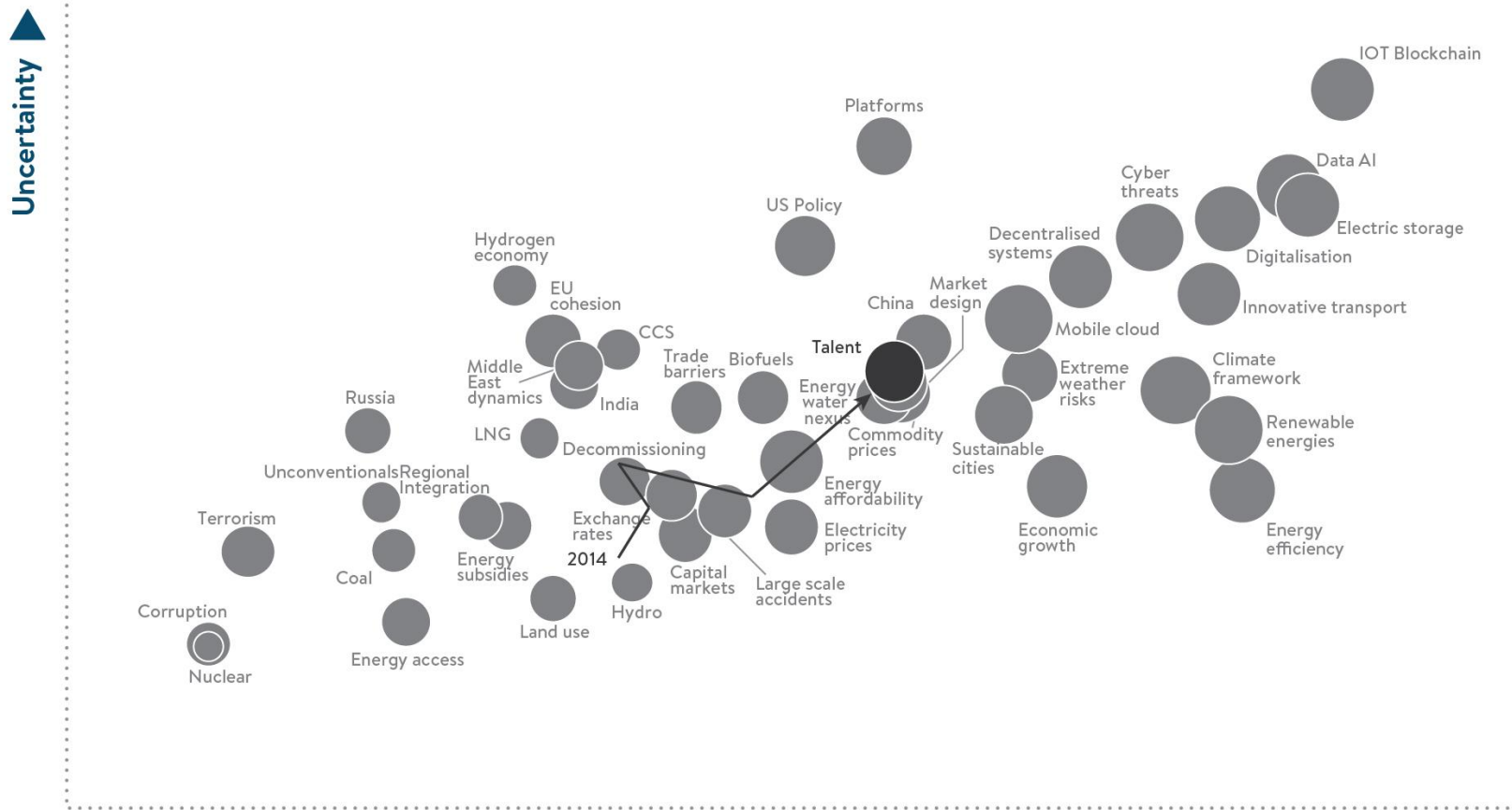
● Innovative Transport: Time tracking from 2014 to 2018



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New Zealand – Talent



World Energy Issues Monitor 2018 - New Zealand - Talent

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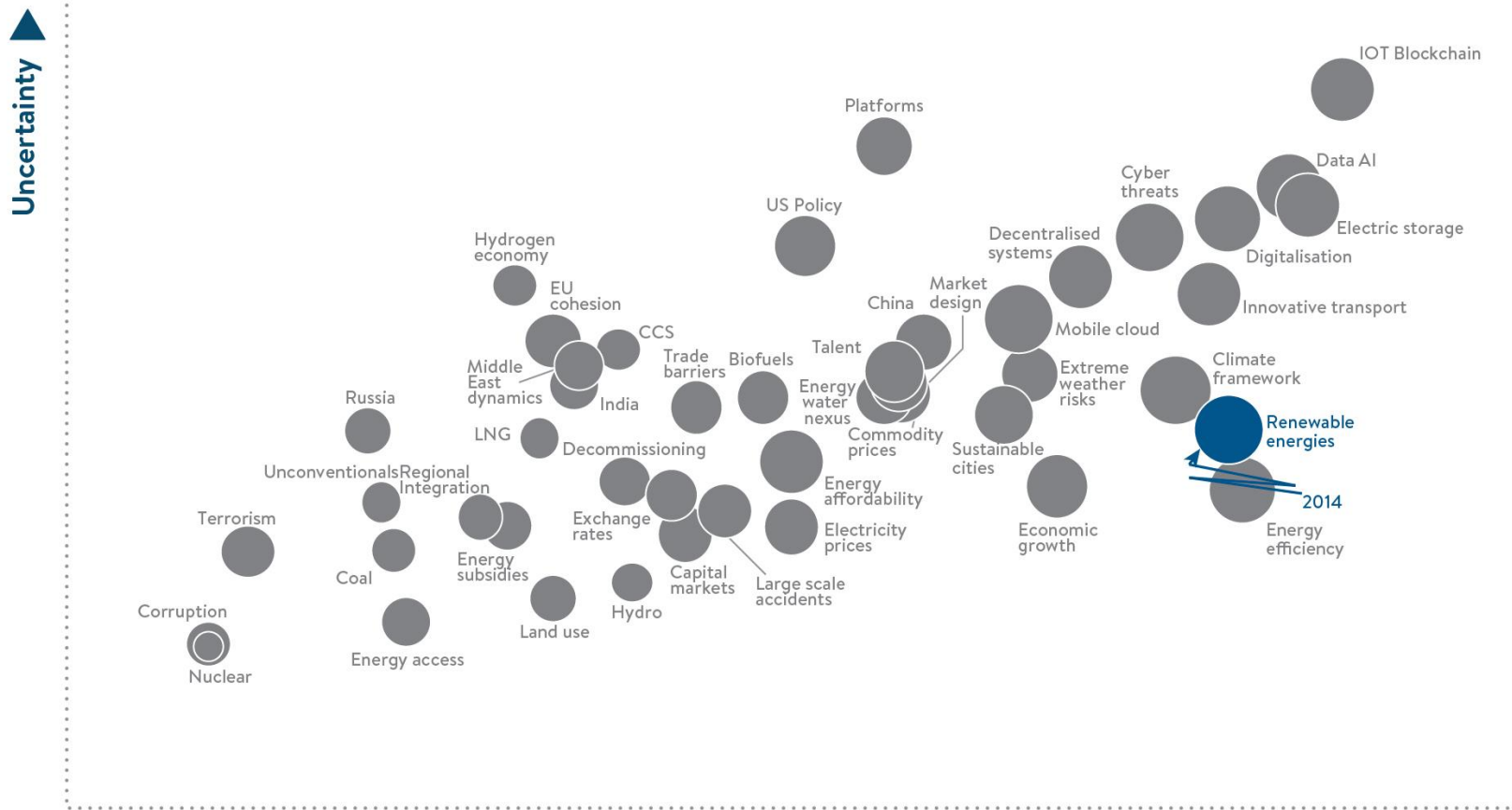
● Talent: Time tracking from 2014 to 2018

Less urgent ○○○ More urgent

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New Zealand – Renewable Energies



World Energy Issues Monitor 2018 - New Zealand - Renewable Energies

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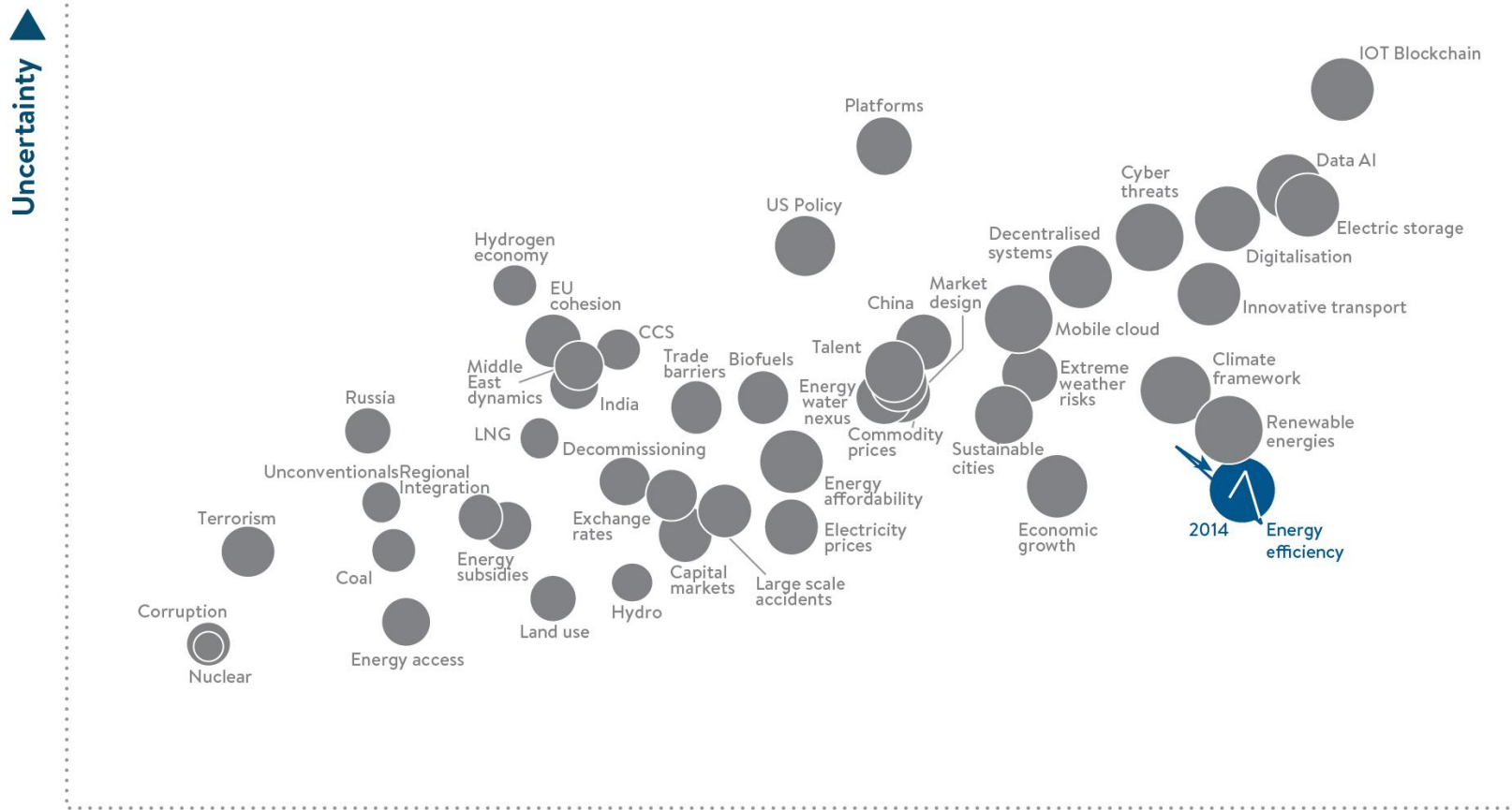
● Renewables: Time tracking from 2014 to 2018

Less urgent ○○○ More urgent

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New Zealand – Energy Efficiency



World Energy Issues Monitor 2018 - New Zealand - Energy Efficiency

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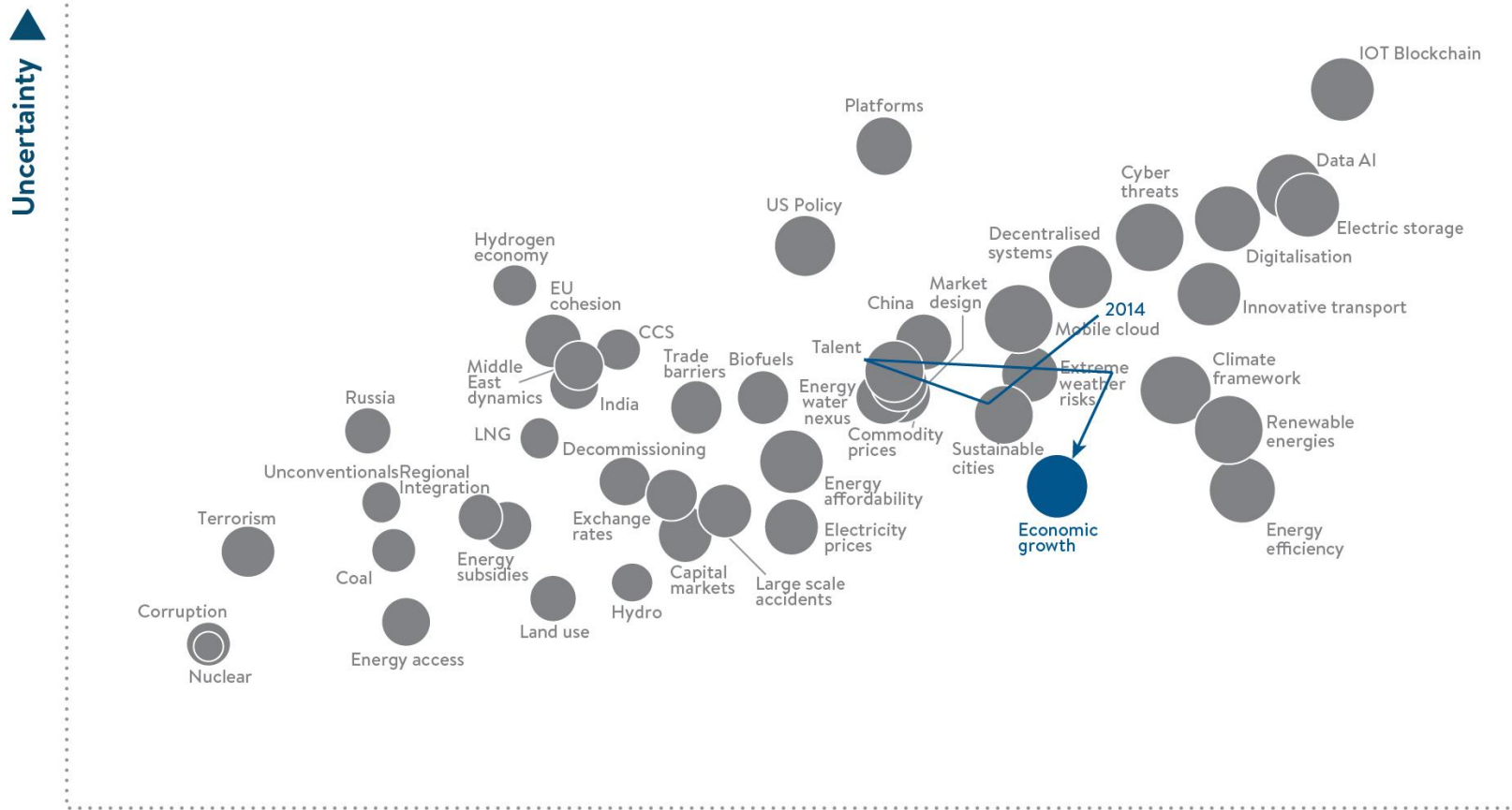
● Energy Efficiency: Time tracking from 2014 to 2018

Less urgent ○○○ More urgent

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New Zealand – Economic Growth



World Energy Issues Monitor 2018 - New Zealand - Economic Growth

Impact ►

● Economic Growth: Time tracking from 2014 to 2018

Less urgent ○○○ More urgent

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Section 6

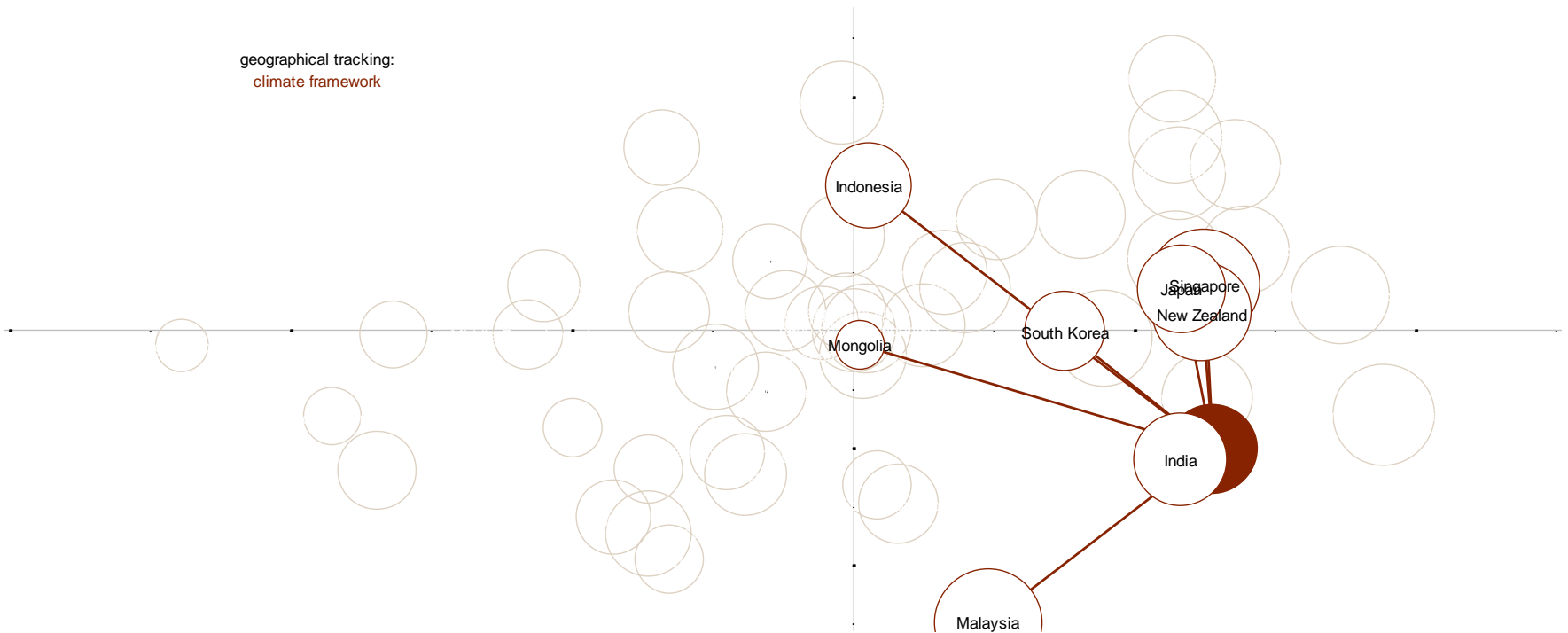
New Zealand

Geographical Tracking

World Energy Issues Monitor 2018

New Zealand – Climate Framework

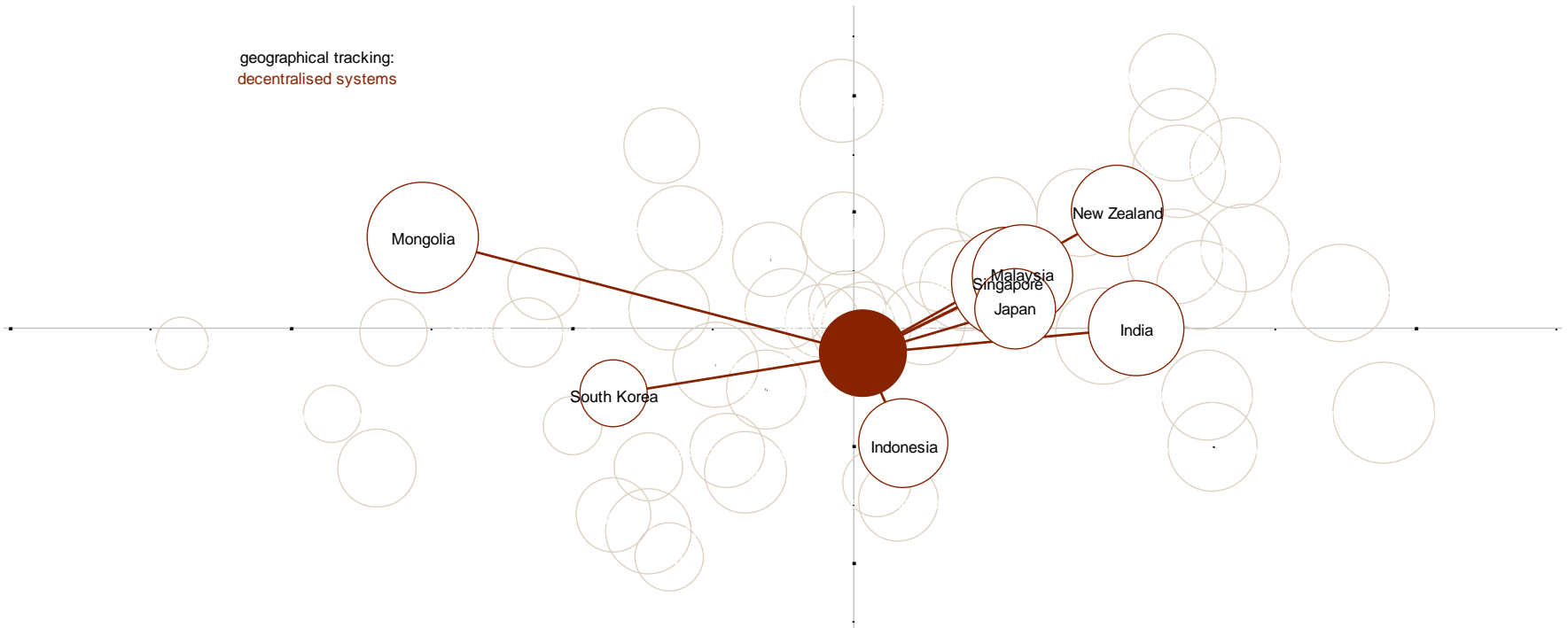
geographical tracking:
climate framework



World Energy Issues Monitor 2018

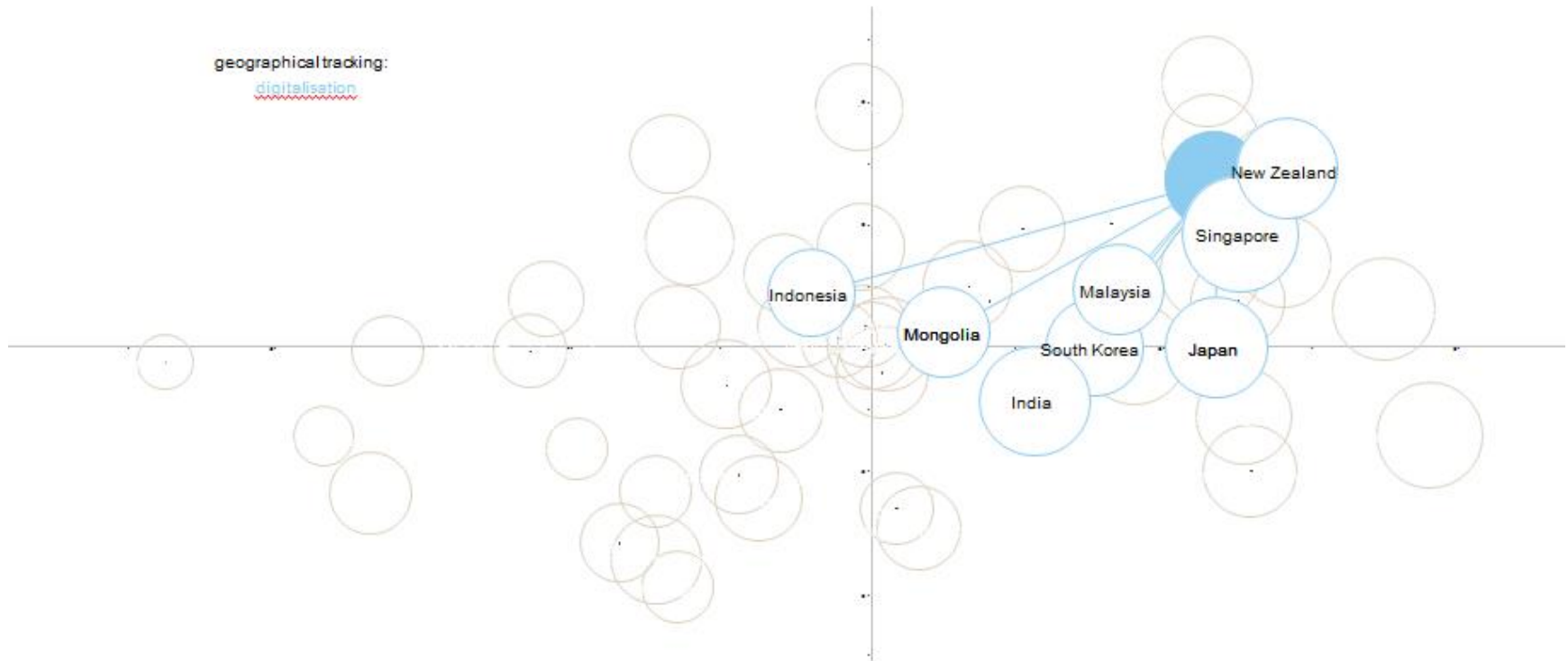
New Zealand – Decentralised Systems

geographical tracking:
decentralised systems



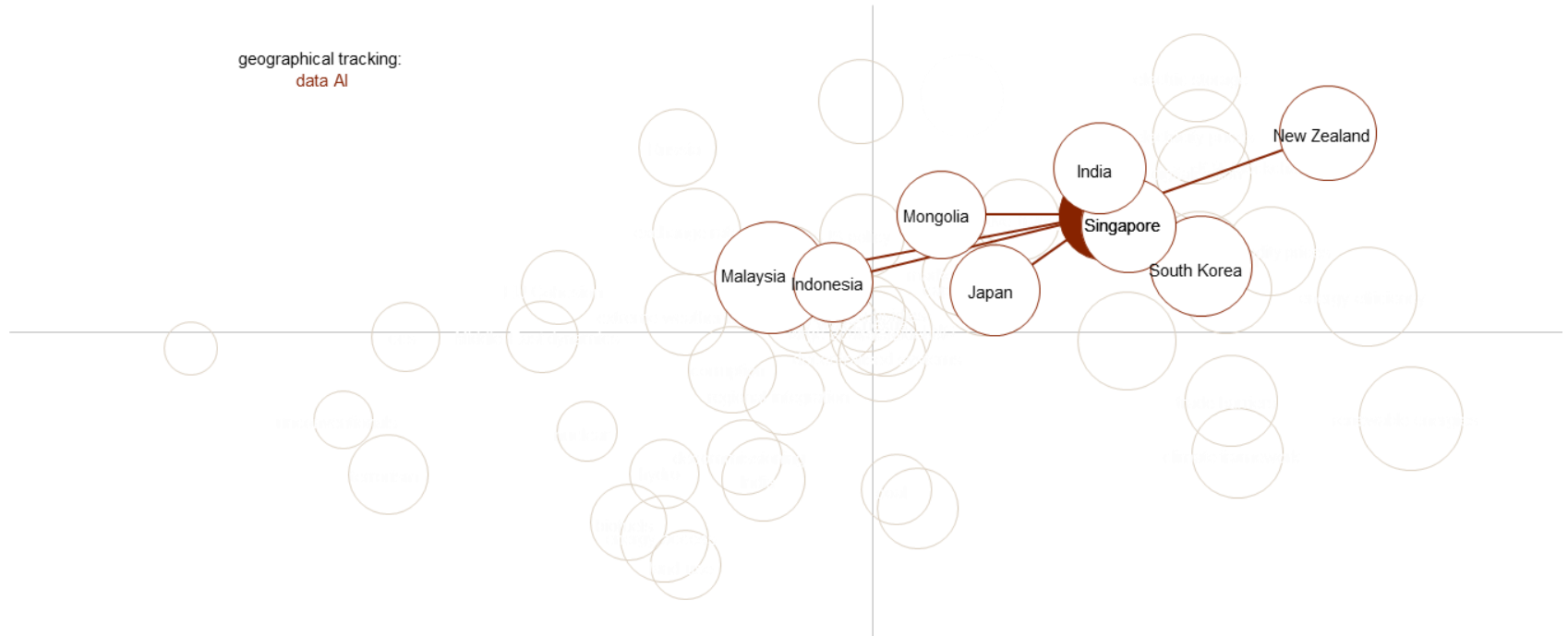
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New Zealand – Digitalisation



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Asia Pacific – Data AI



World Energy Issues Monitor 2018

Asia Pacific – IoT Blockchain

geographical tracking:
IOT blockchain



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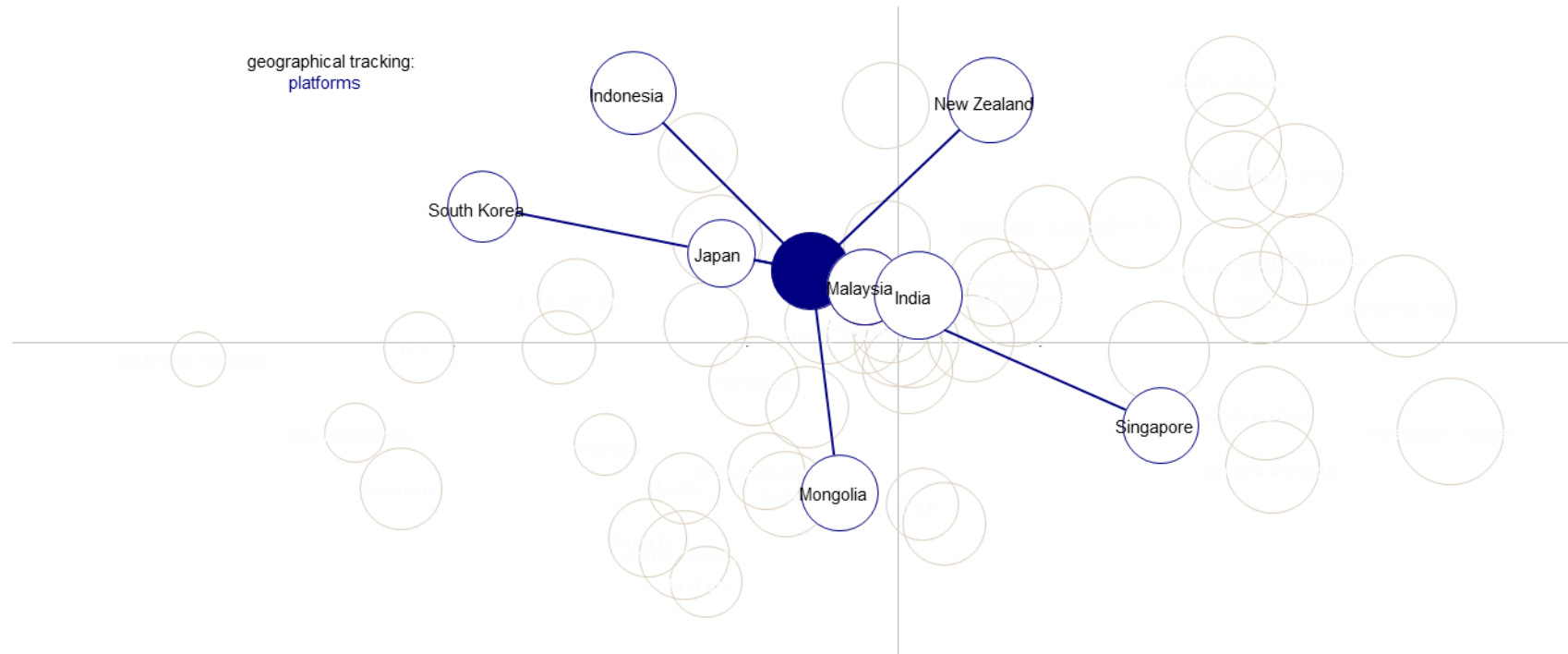
Asia Pacific – Mobile Cloud

geographical tracking:
mobile cloud



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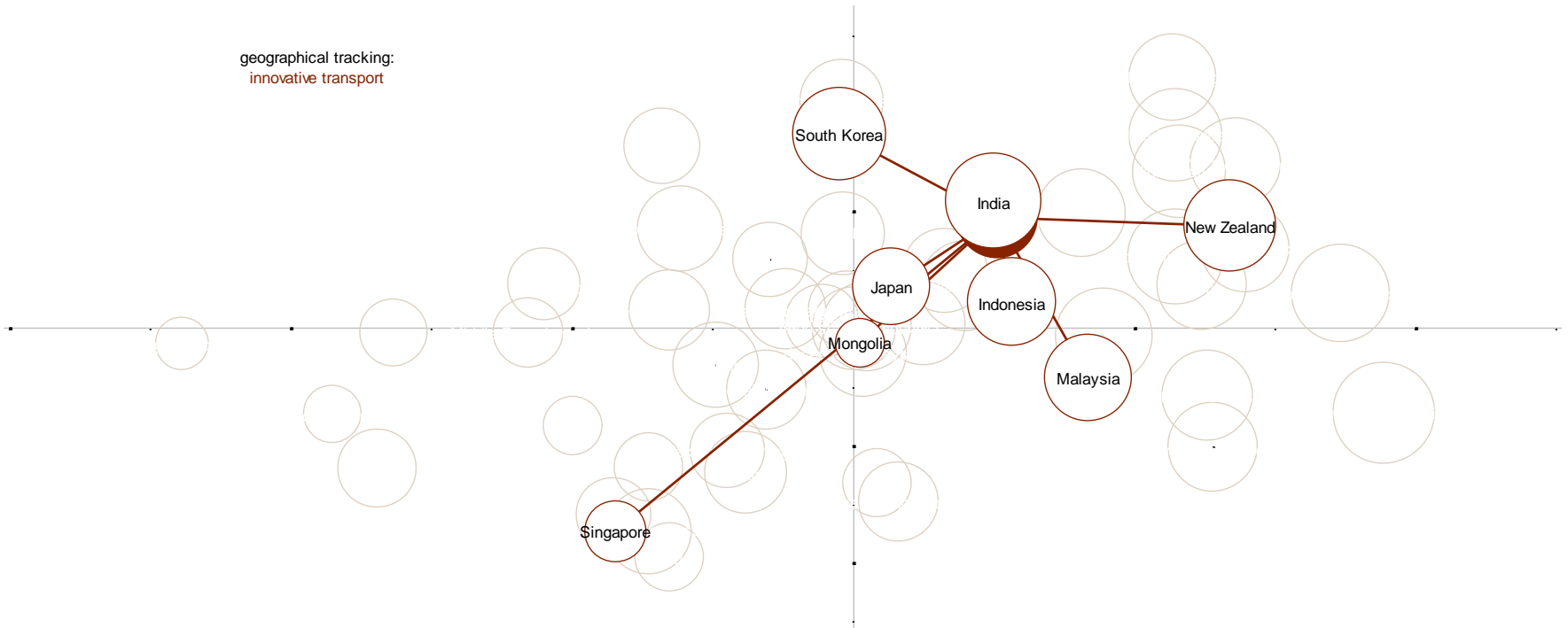
Asia Pacific – Platform



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New Zealand – Innovative Transport

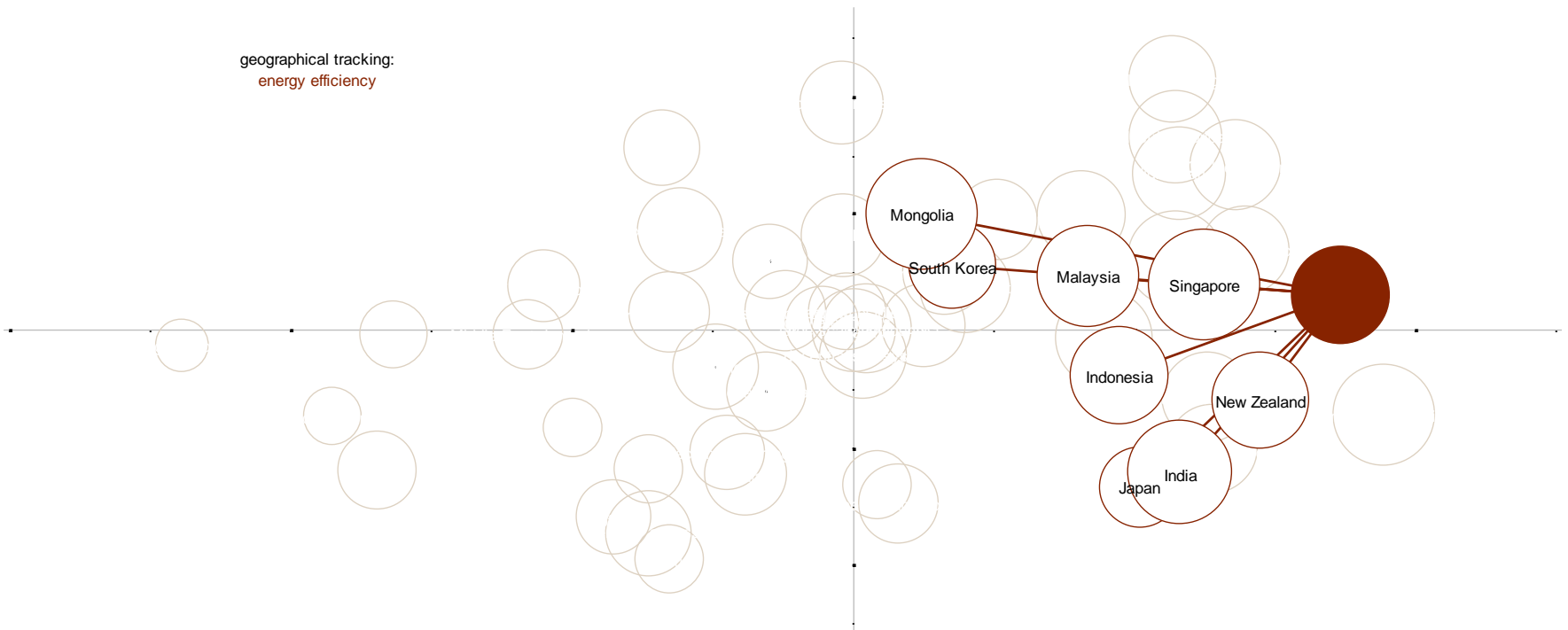
geographical tracking:
innovative transport



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New Zealand – Energy Efficiency

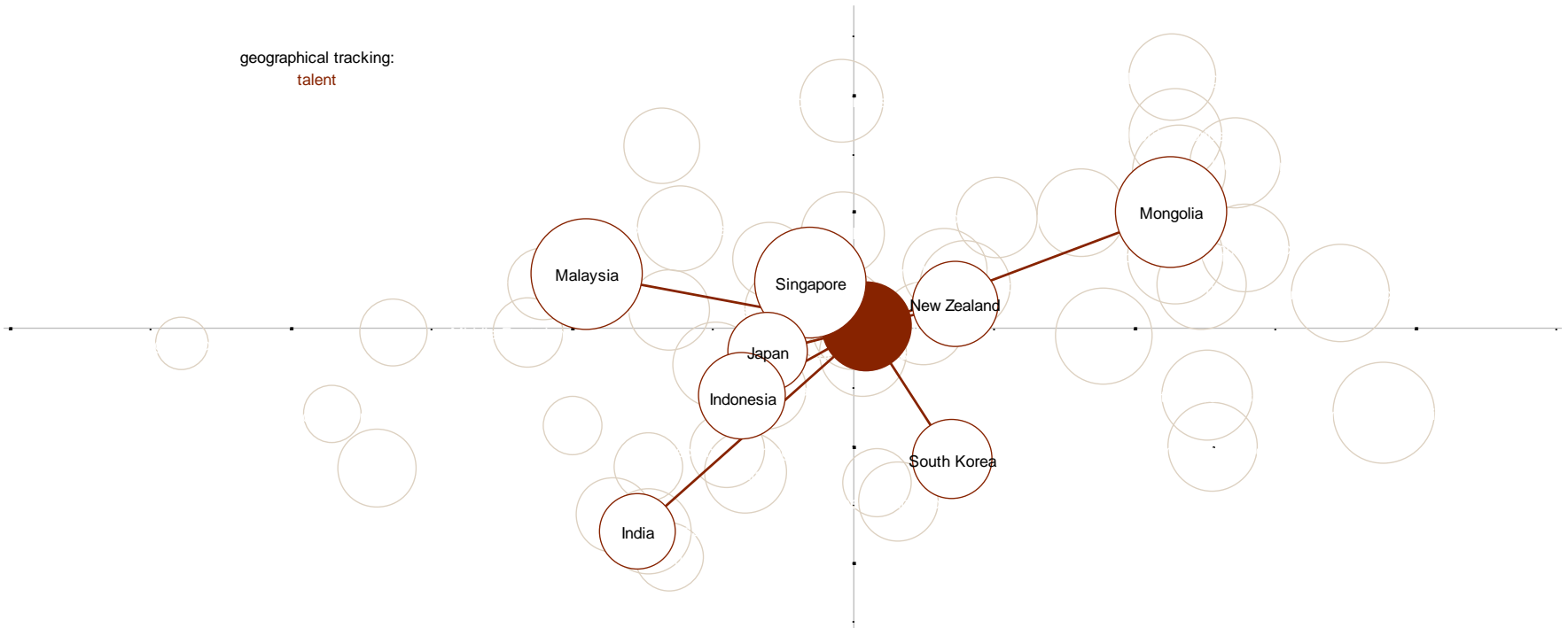
geographical tracking:
energy efficiency



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New Zealand – Talent

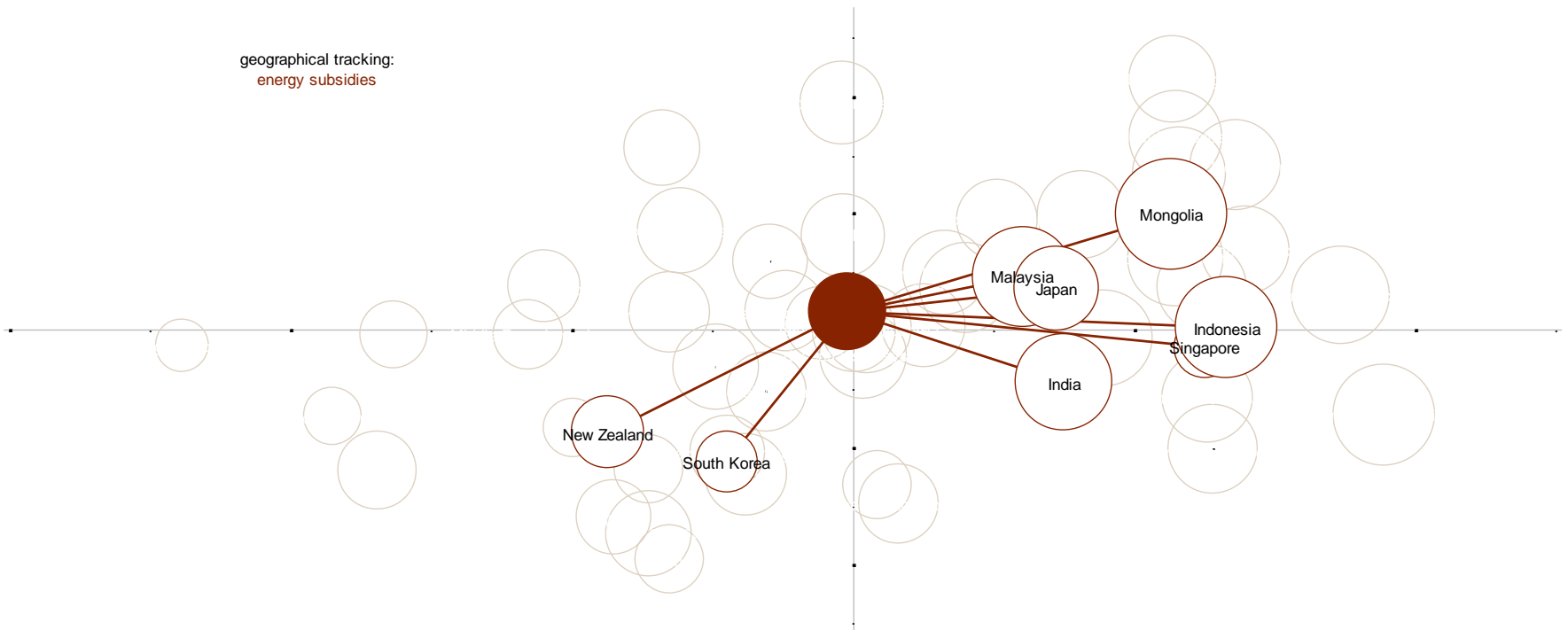
geographical tracking:
talent



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New Zealand – Energy Subsidies

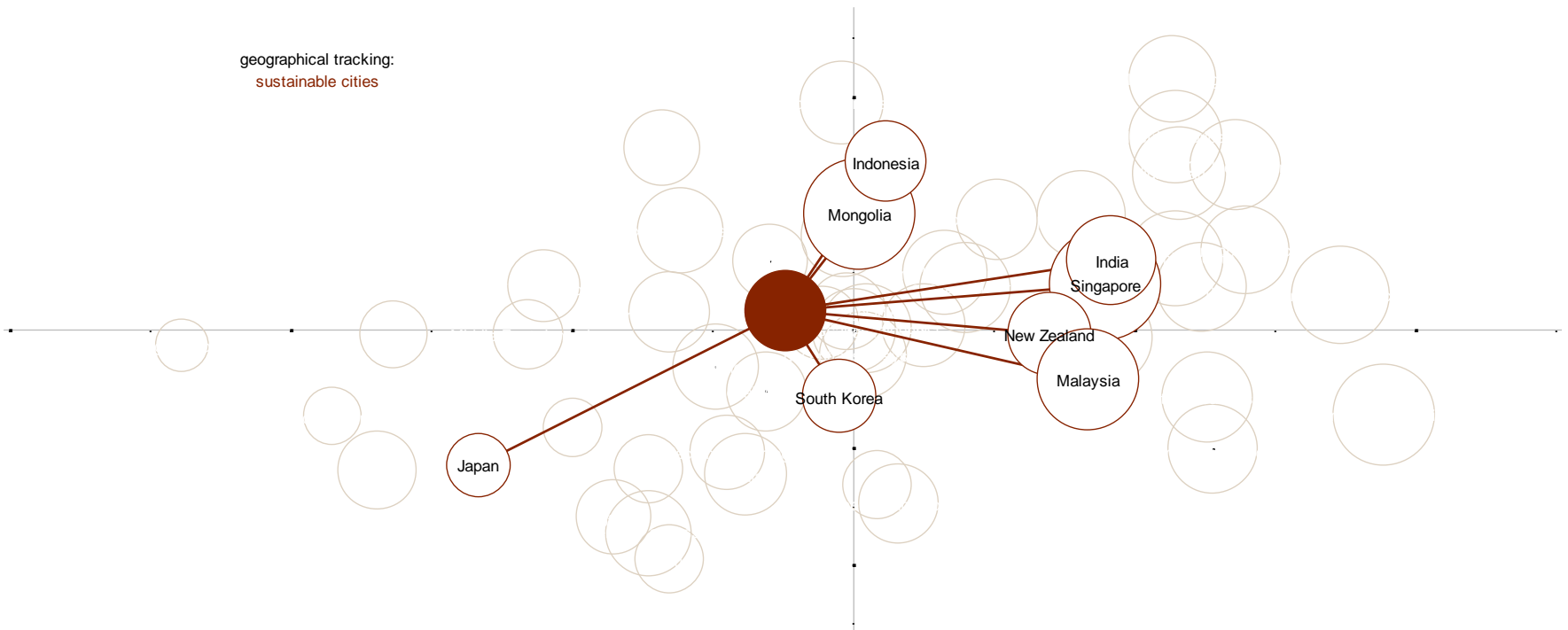
geographical tracking:
energy subsidies



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New Zealand – Sustainable Cities

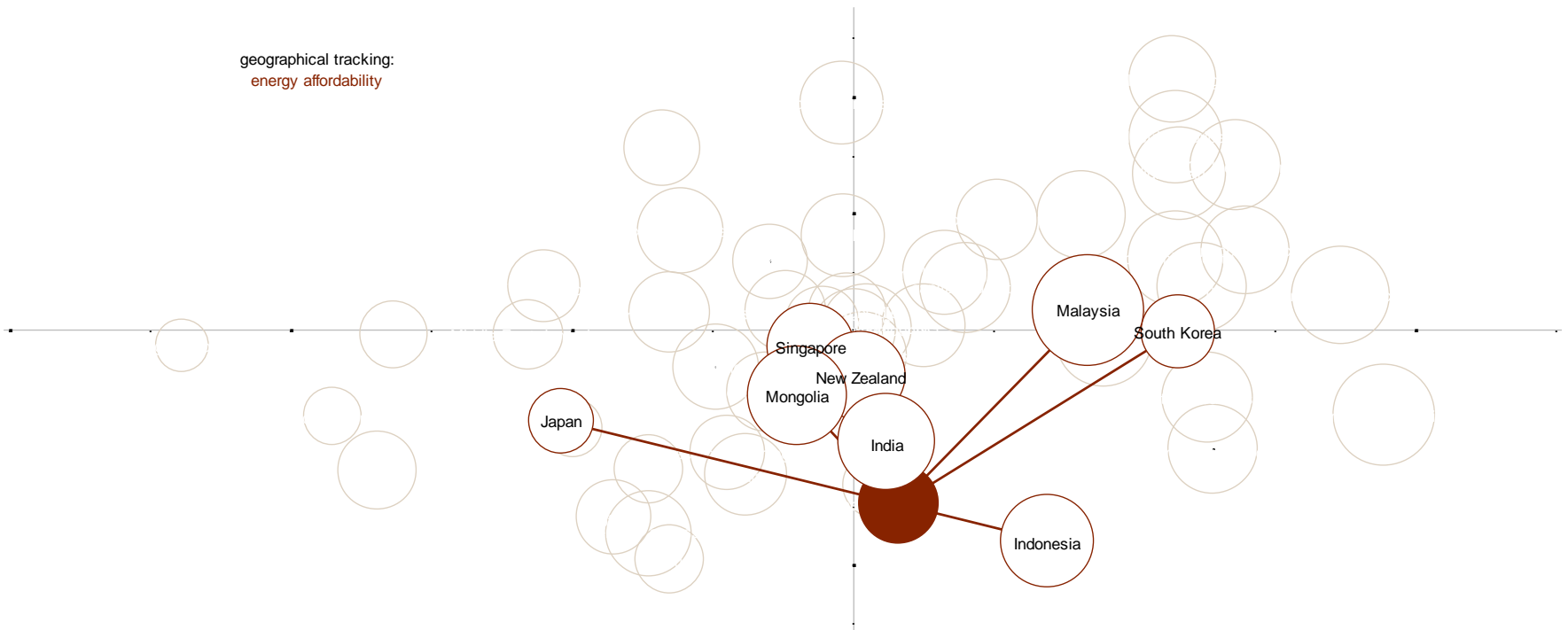
geographical tracking:
sustainable cities



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New Zealand – Energy Affordability

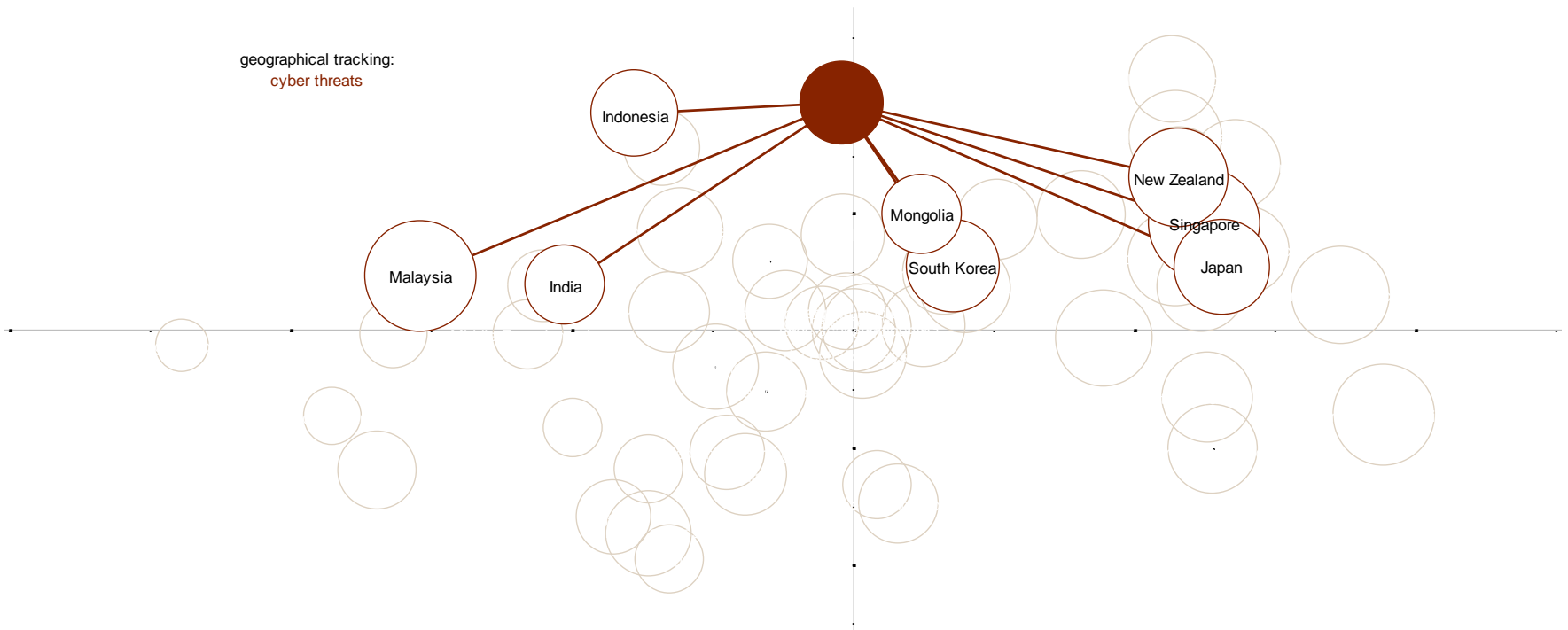
geographical tracking:
energy affordability



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New Zealand – Cyber Threats

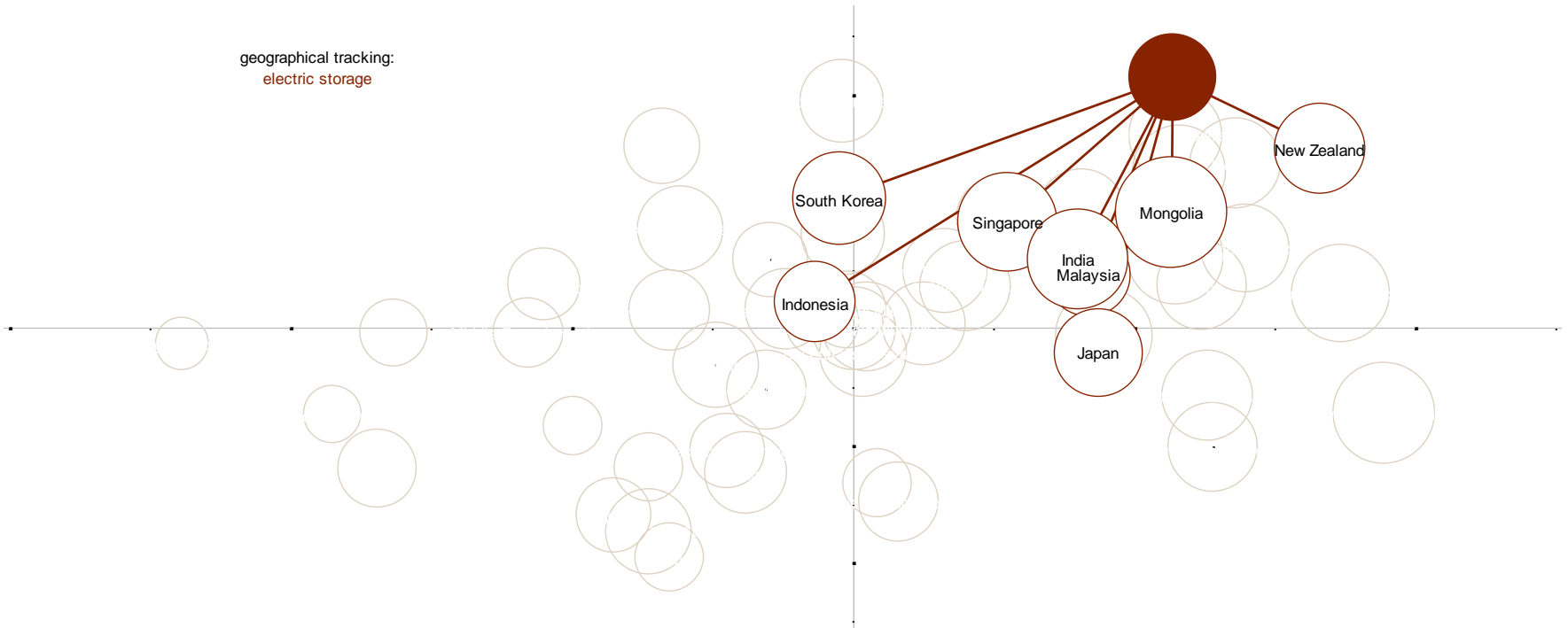
geographical tracking:
cyber threats



World Energy Issues Monitor 2018

New Zealand – Electric Storage

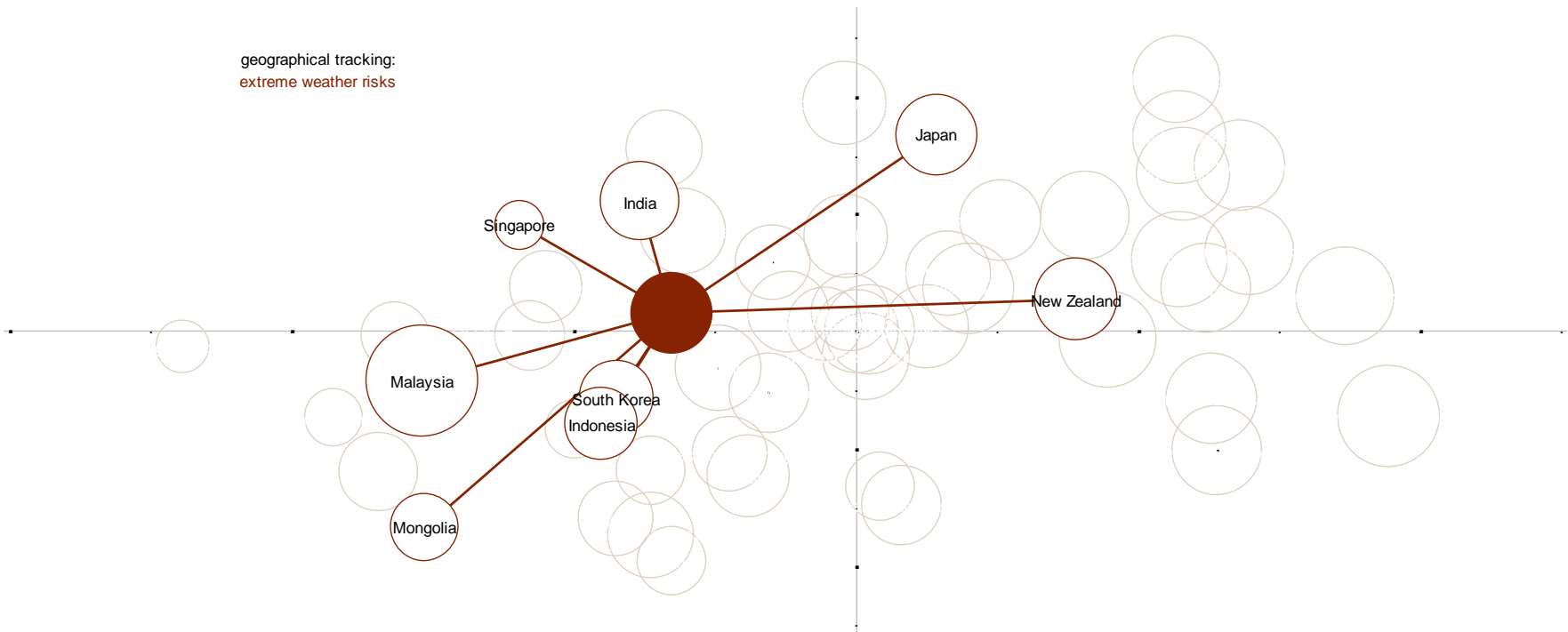
geographical tracking:
electric storage



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New Zealand – Extreme Weather Risk

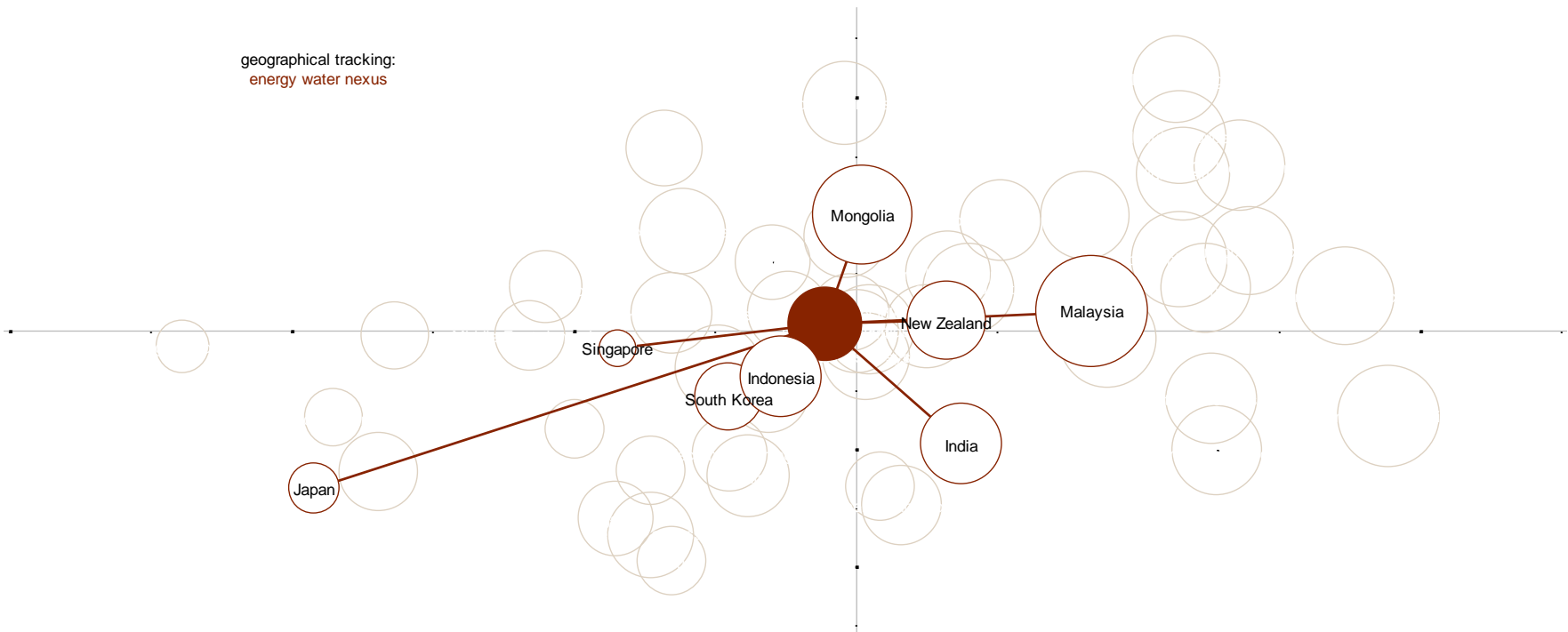
geographical tracking:
extreme weather risks



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New Zealand – Energy Water Nexus

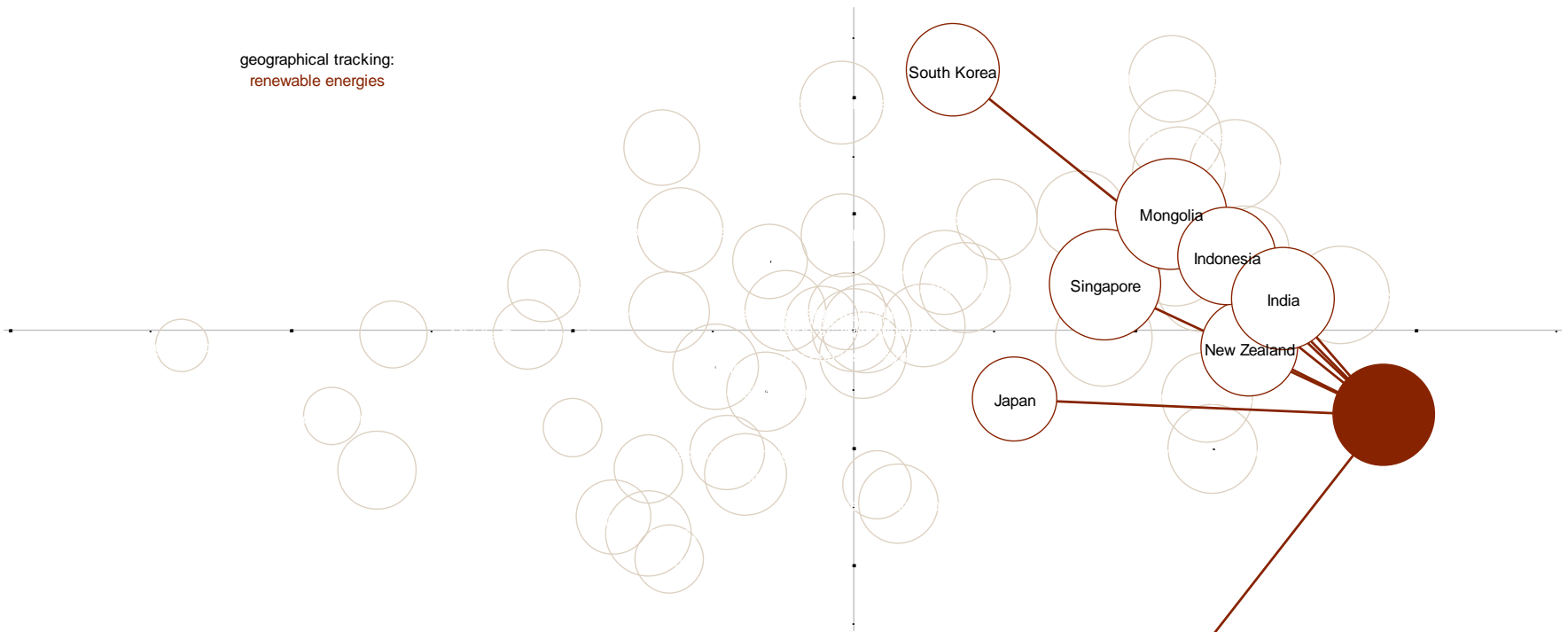
geographical tracking:
energy water nexus



World Energy Issues Monitor 2018

New Zealand – Renewable Energies

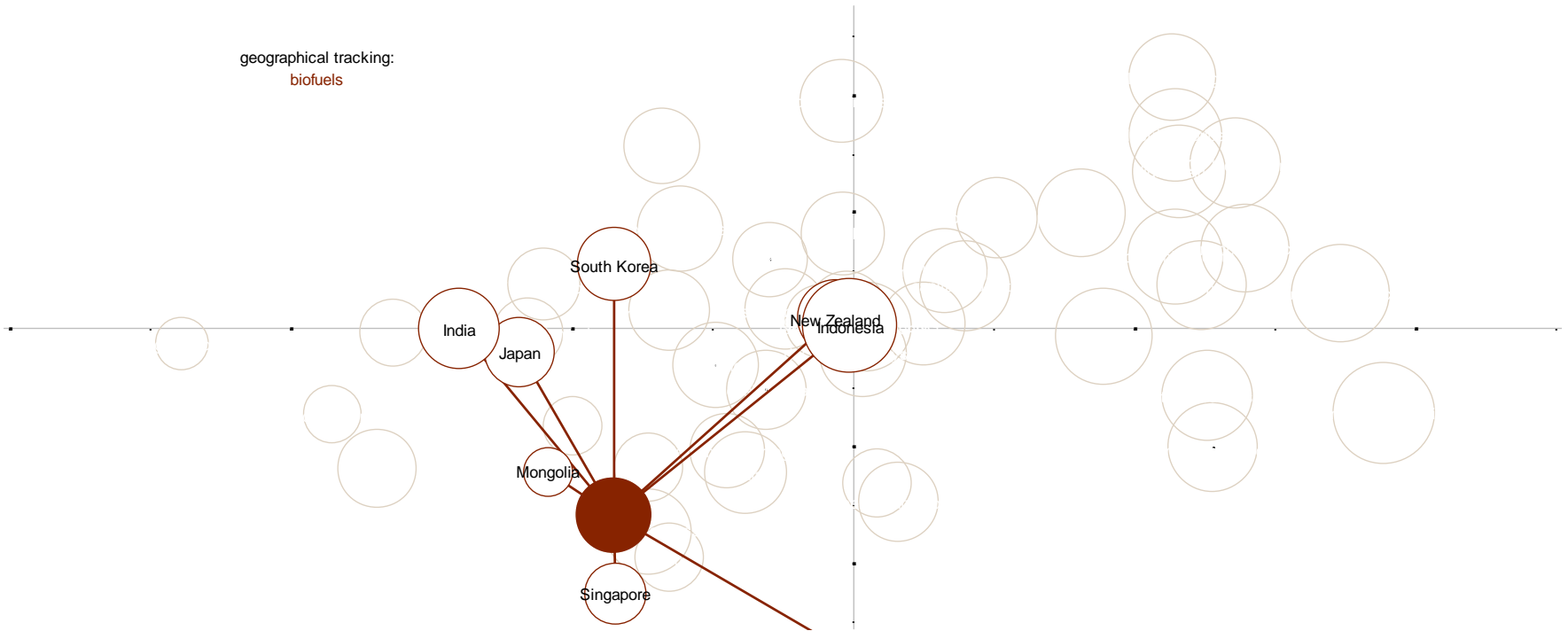
geographical tracking:
renewable energies



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New Zealand – Biofuels

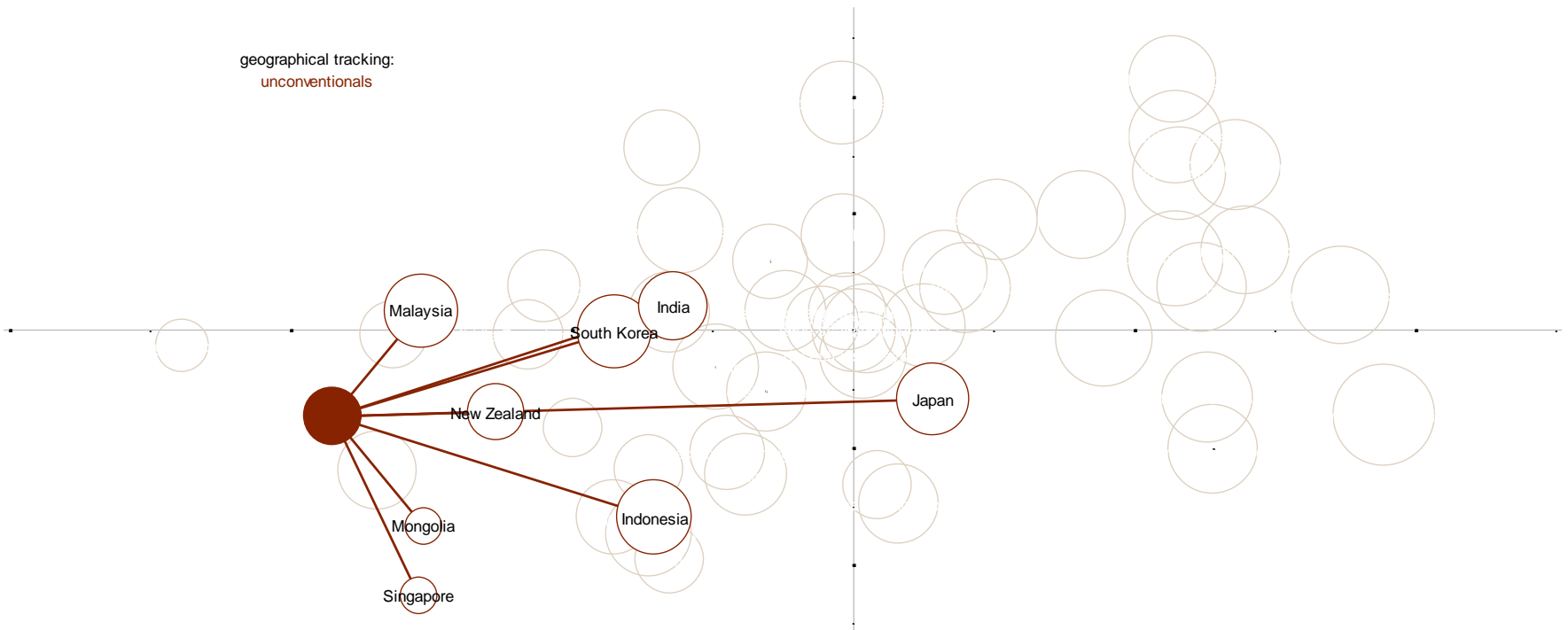
geographical tracking:
biofuels



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New Zealand – Unconventionals

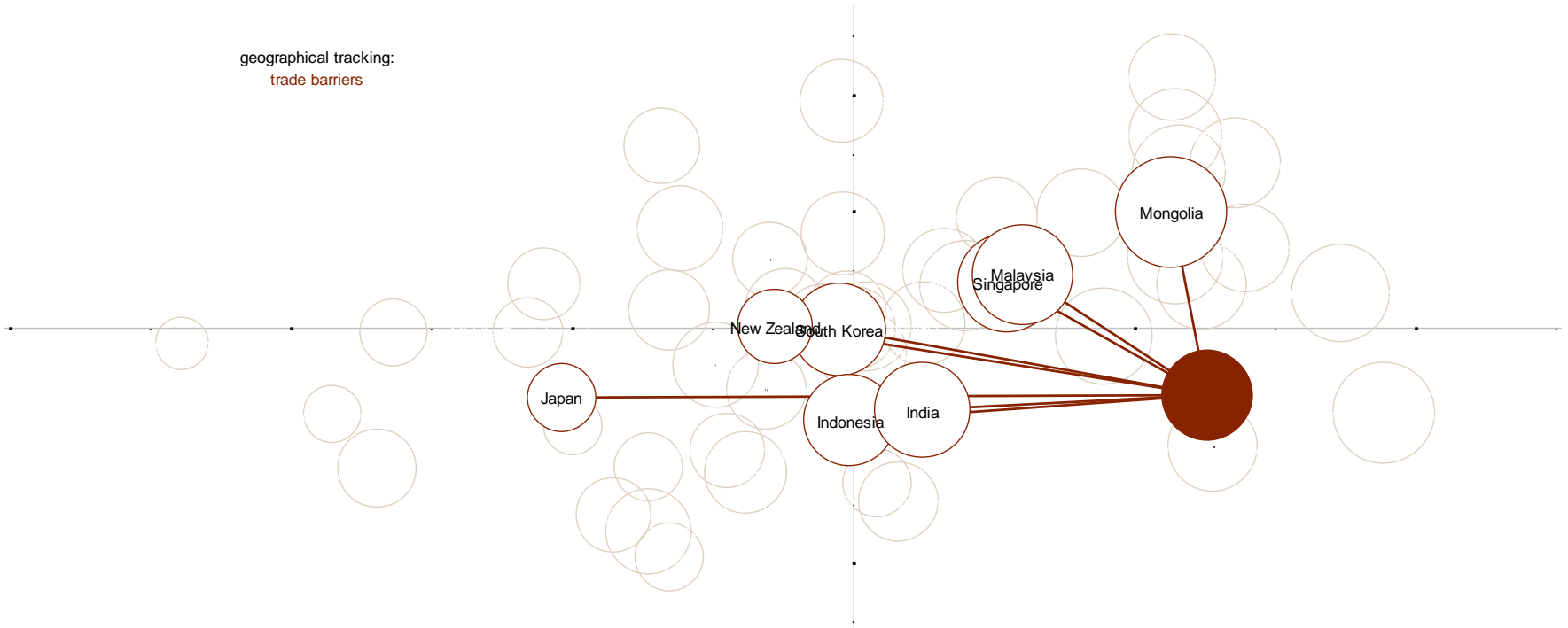
geographical tracking:
unconventionals



World Energy Issues Monitor 2018

New Zealand – Trade Barriers

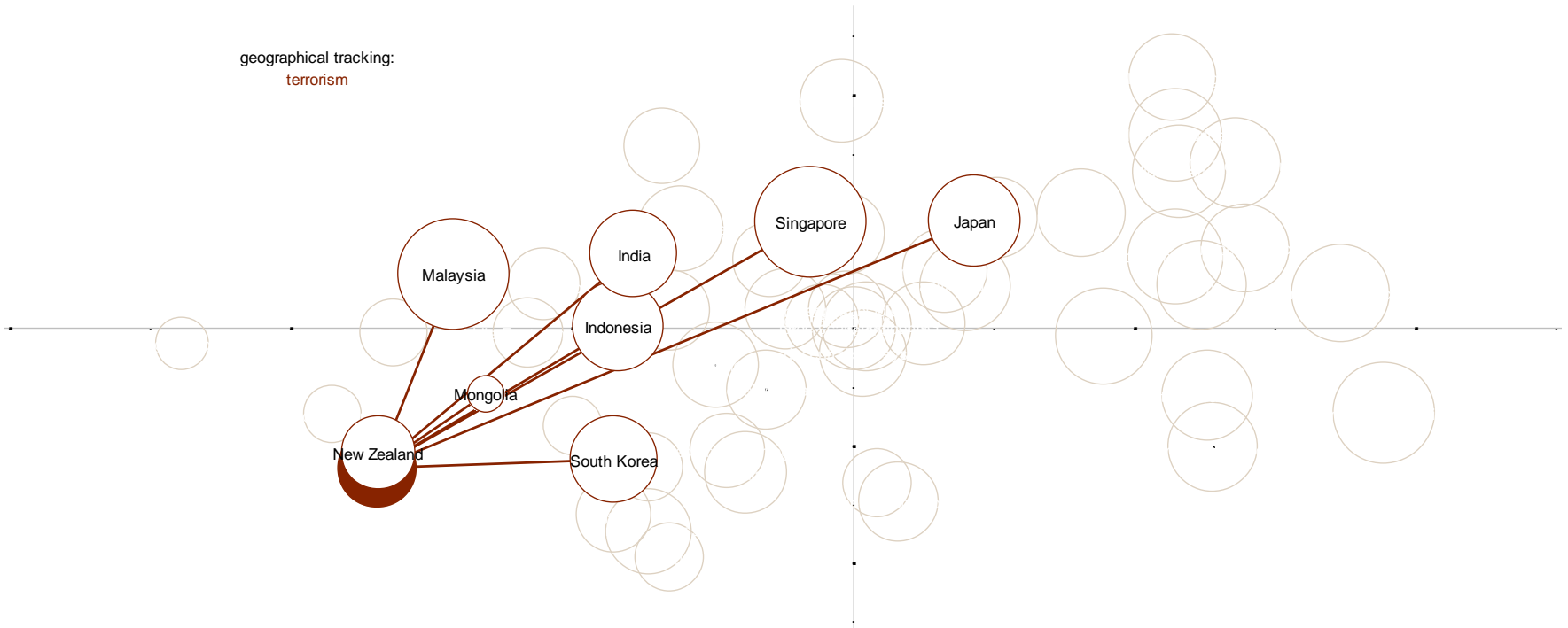
geographical tracking:
trade barriers



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New Zealand – Terrorism

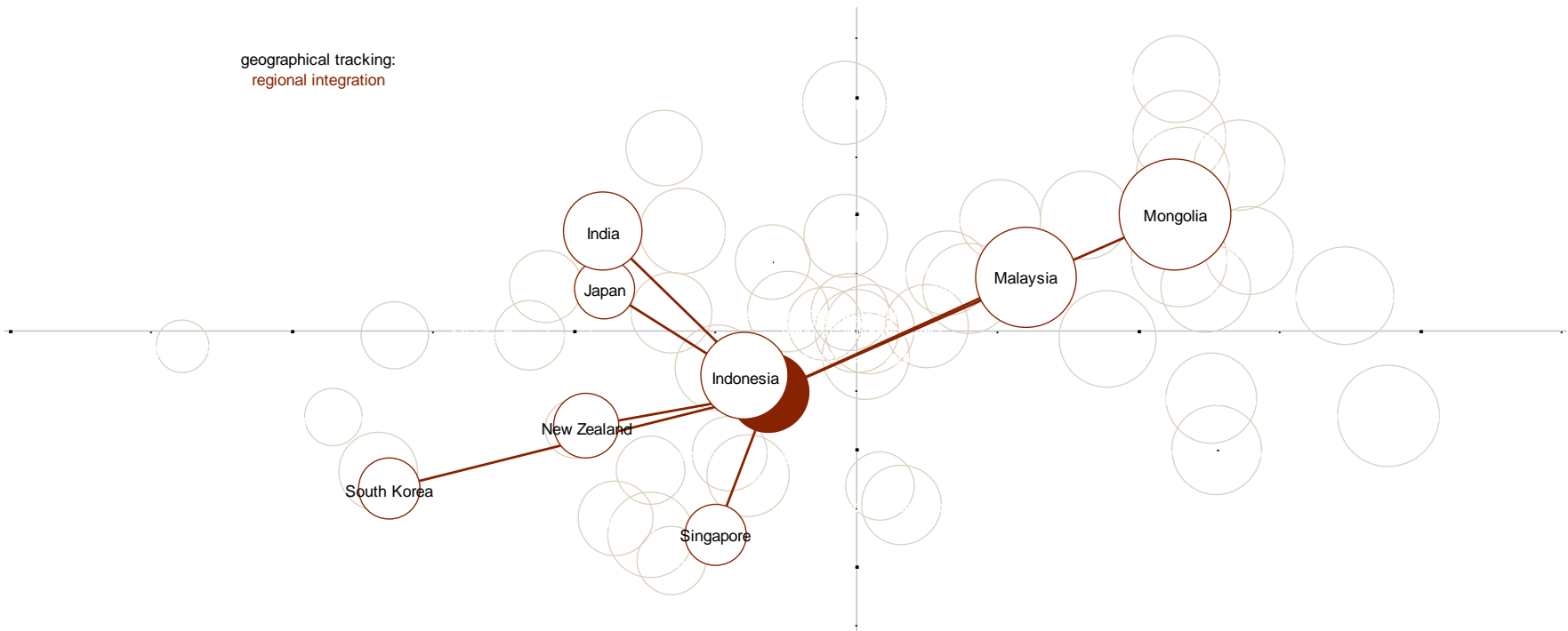
geographical tracking:
terrorism



World Energy Issues Monitor 2018

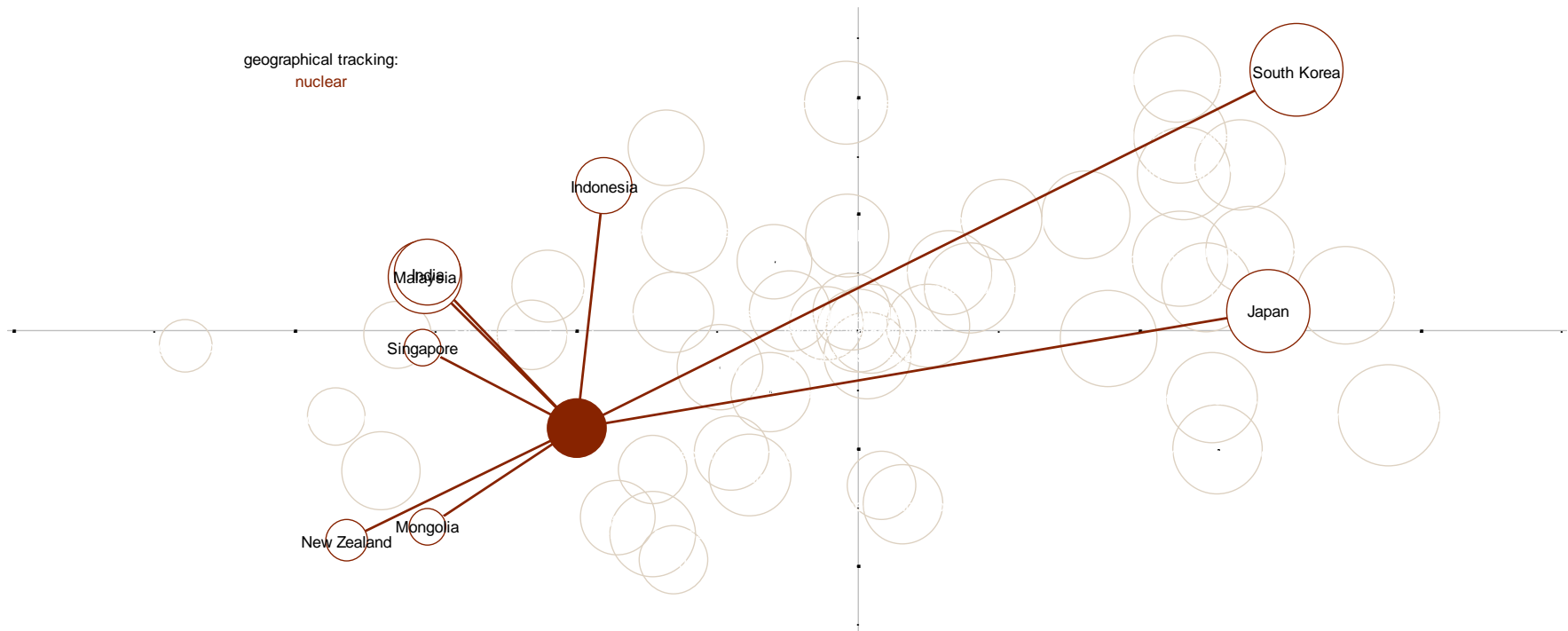
New Zealand – Regional Integration

geographical tracking:
regional integration



World Energy Issues Monitor 2018

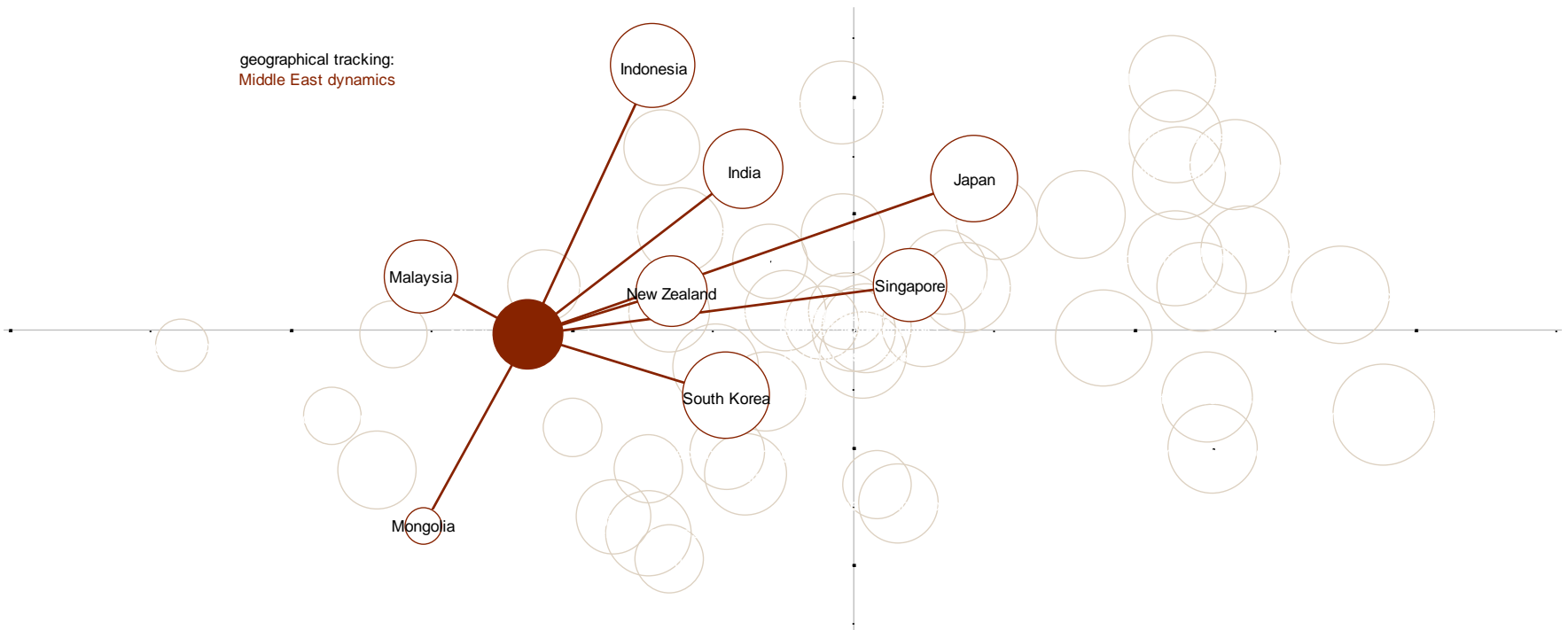
New Zealand – Nuclear



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New Zealand – Middle East Dynamics

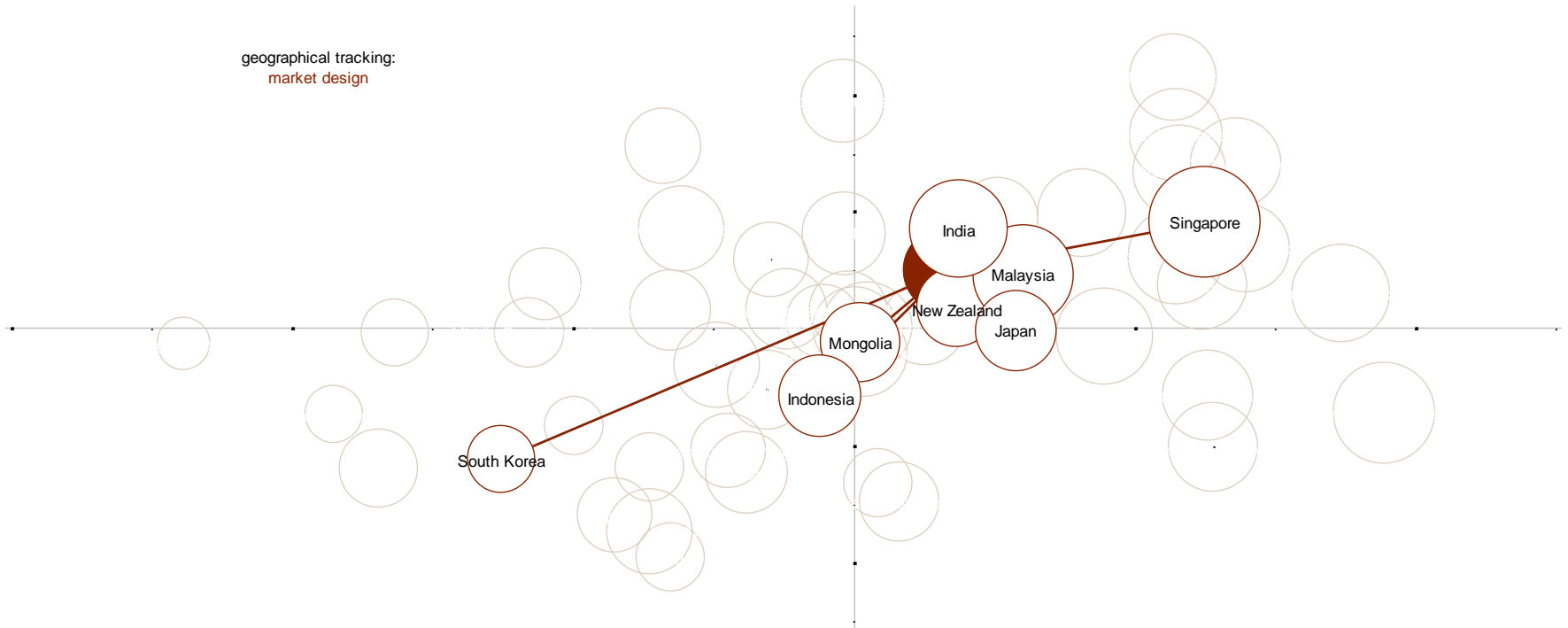
geographical tracking:
Middle East dynamics



World Energy Issues Monitor 2018

New Zealand – Market Design

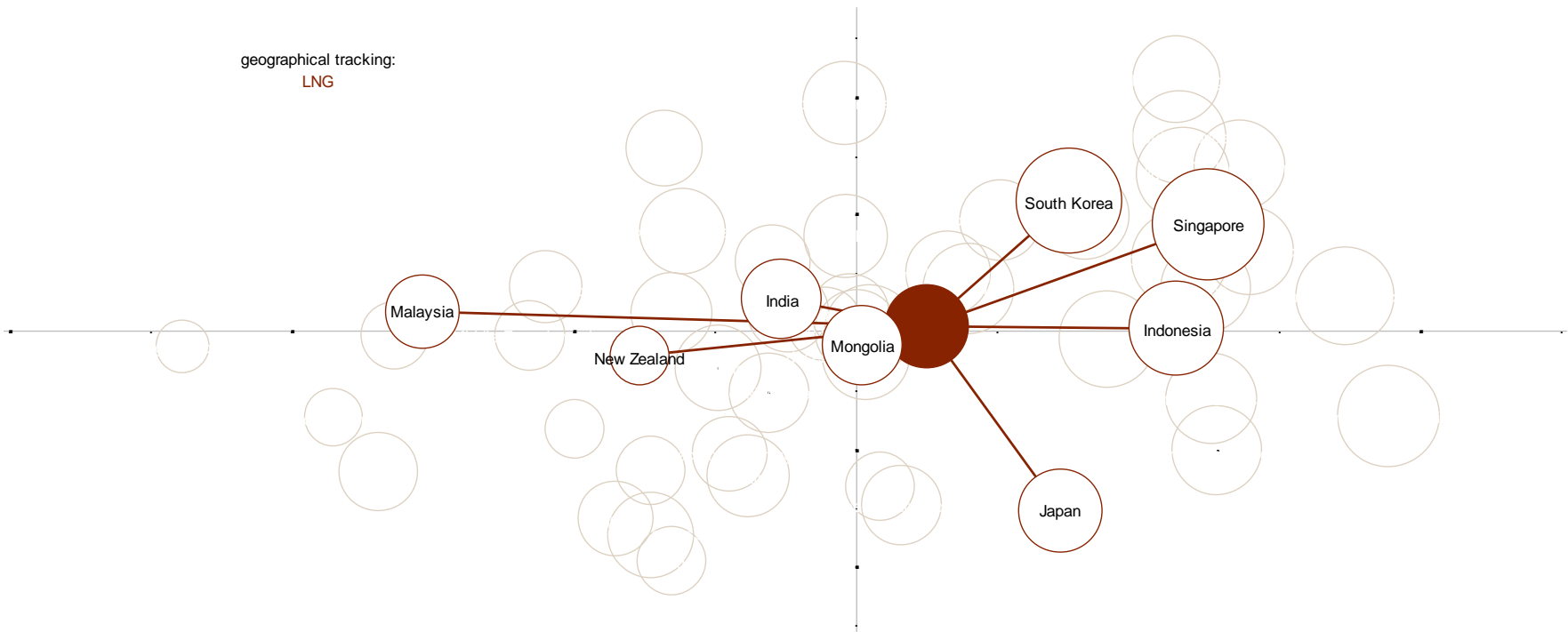
geographical tracking:
market design



World Energy Issues Monitor 2018

New Zealand – LNG

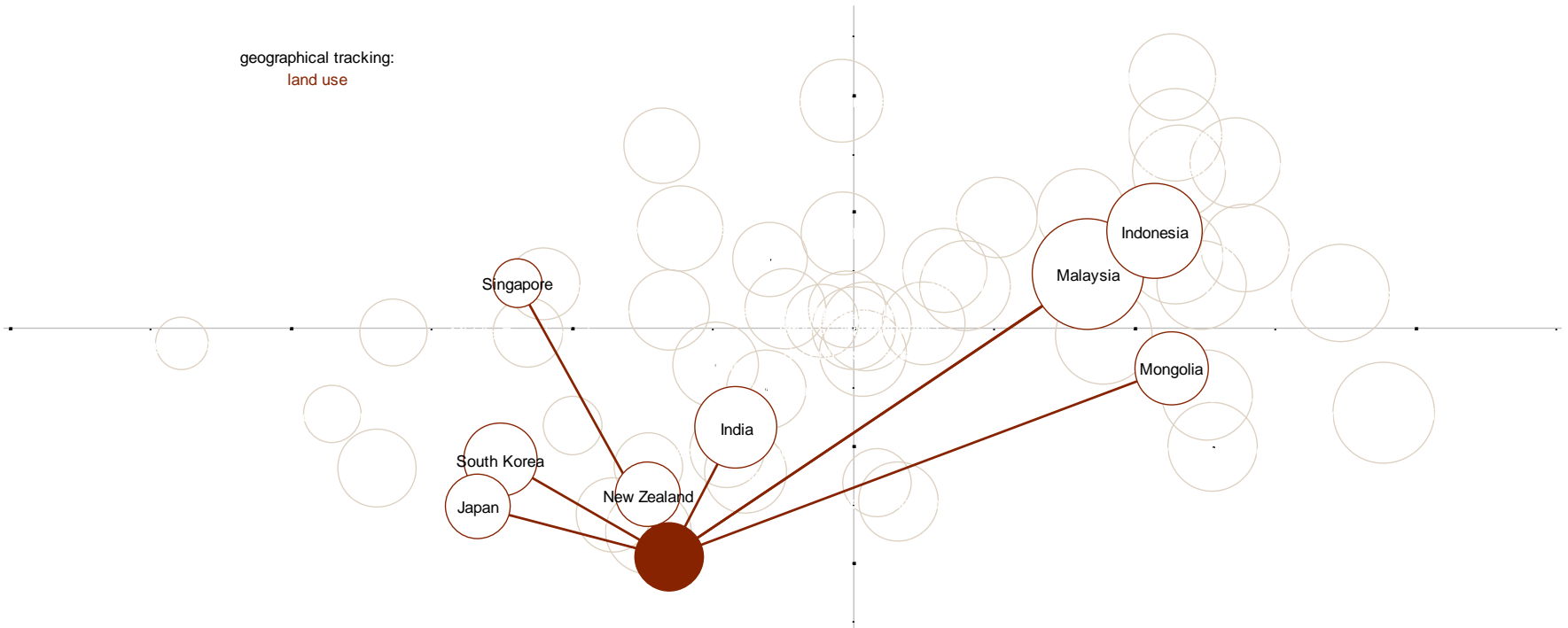
geographical tracking:
LNG



World Energy Issues Monitor 2018

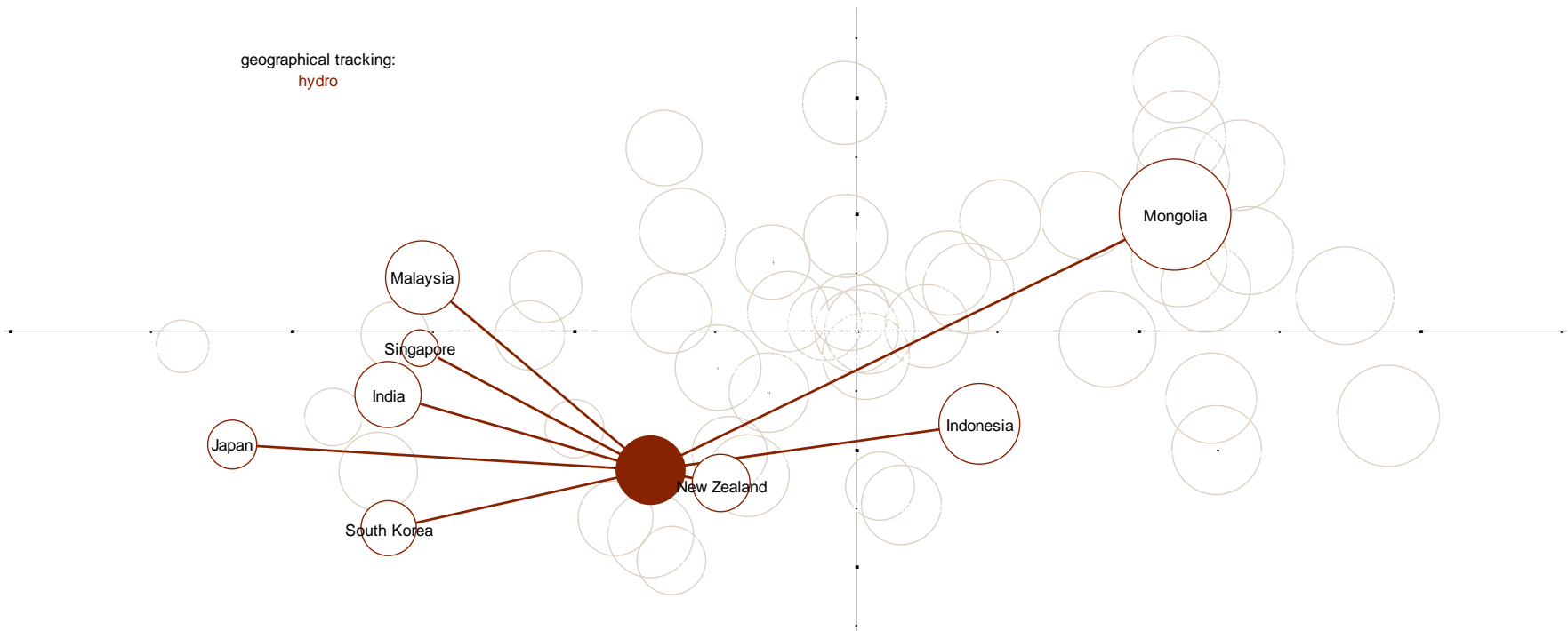
New Zealand – Land Use

geographical tracking:
land use



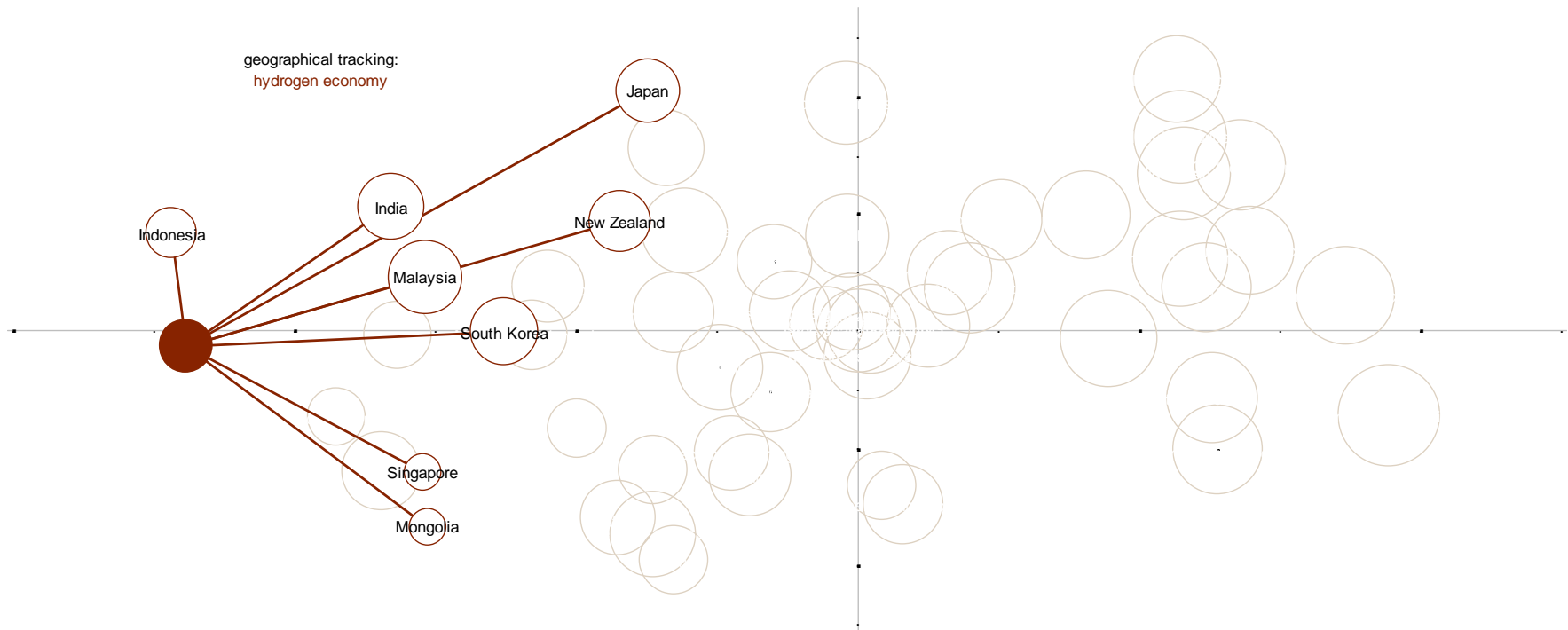
World Energy Issues Monitor 2018

New Zealand – Hydro



World Energy Issues Monitor 2018

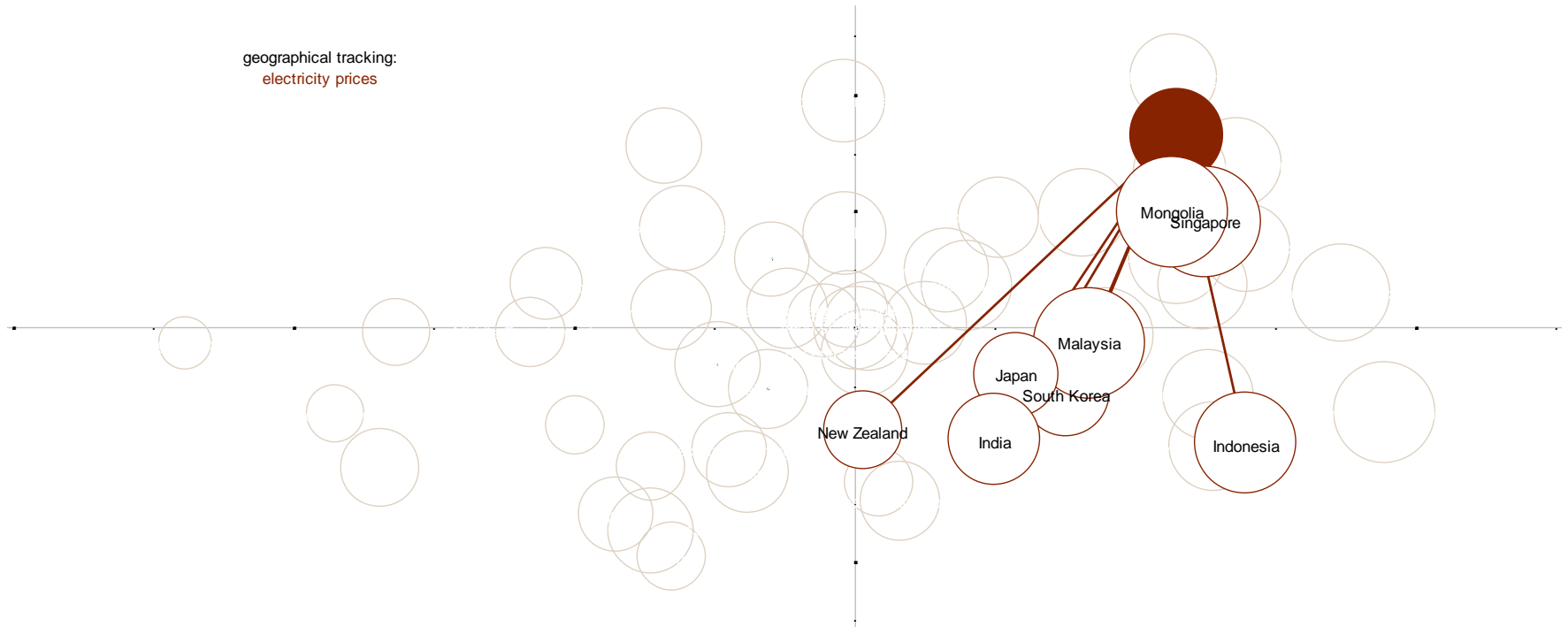
New Zealand – Hydrogen Economy



World Energy Issues Monitor 2018

New Zealand – Electricity Price

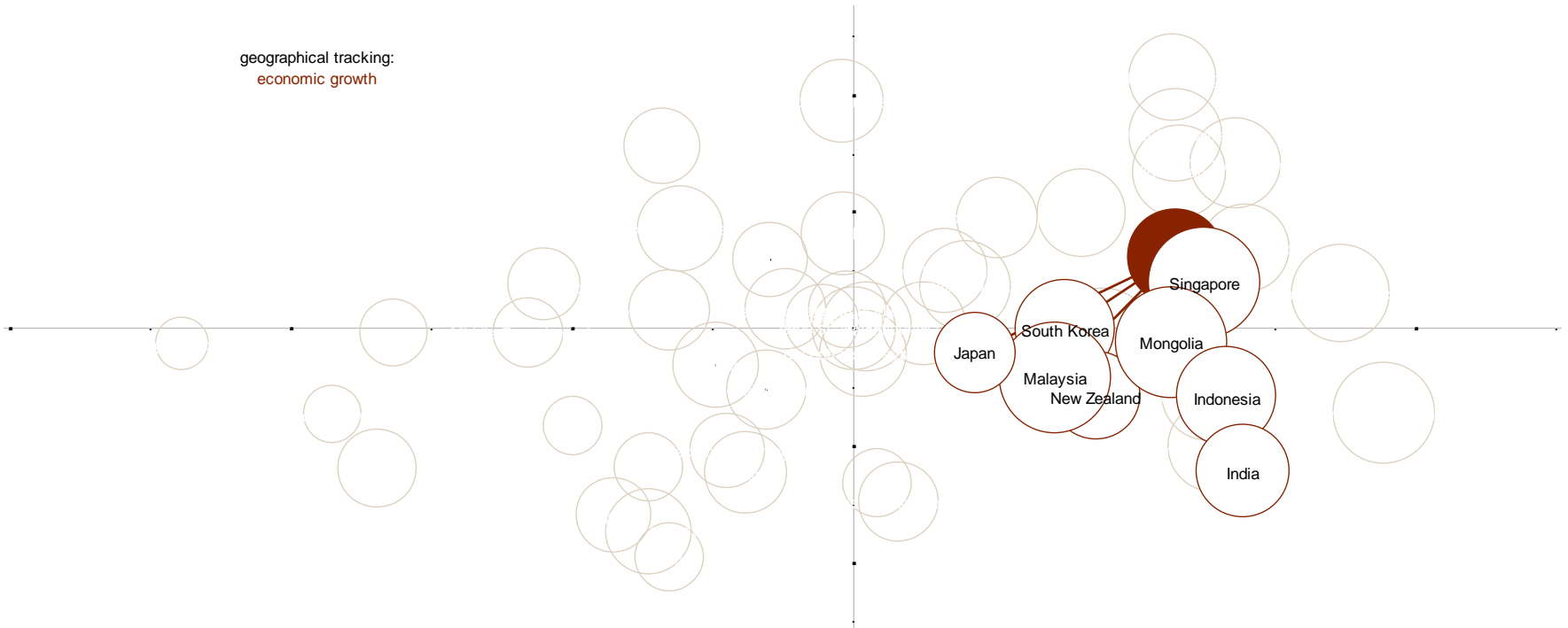
geographical tracking:
electricity prices



World Energy Issues Monitor 2018

New Zealand – Economic Growth

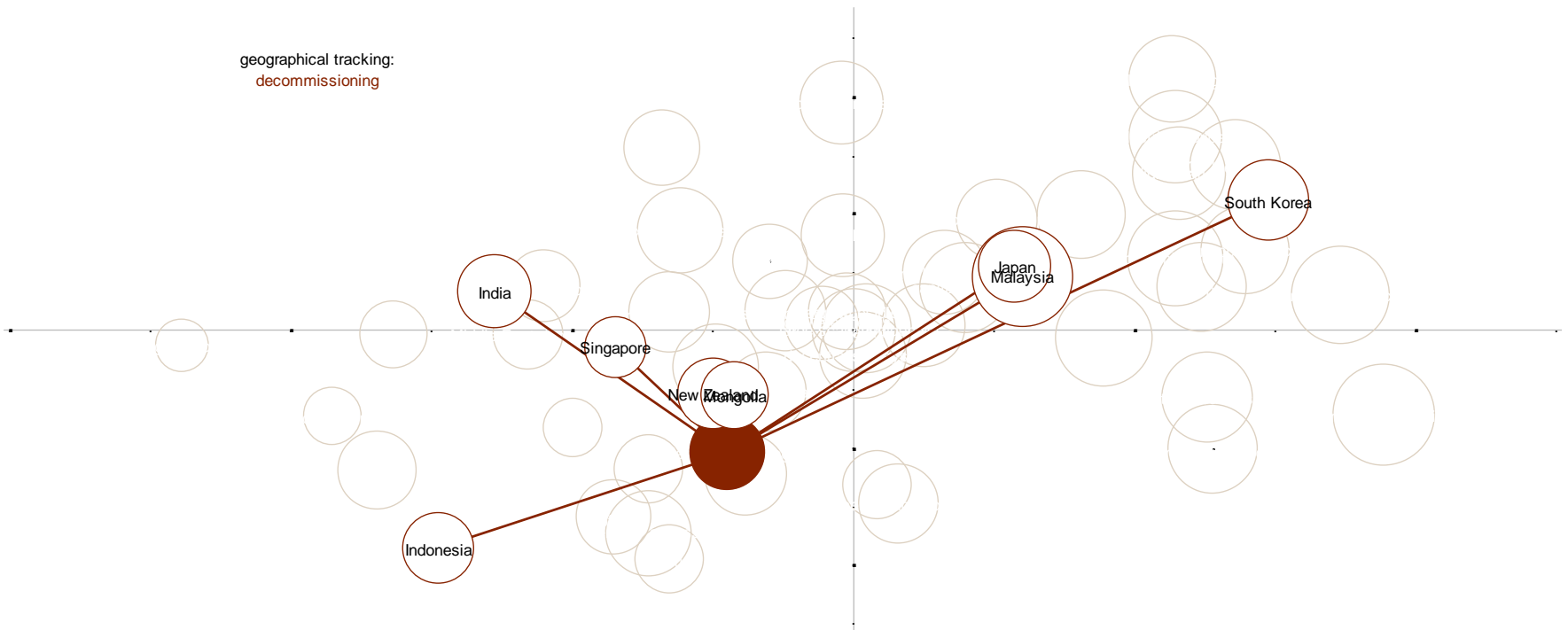
geographical tracking:
economic growth



World Energy Issues Monitor 2018

New Zealand – Decommissioning

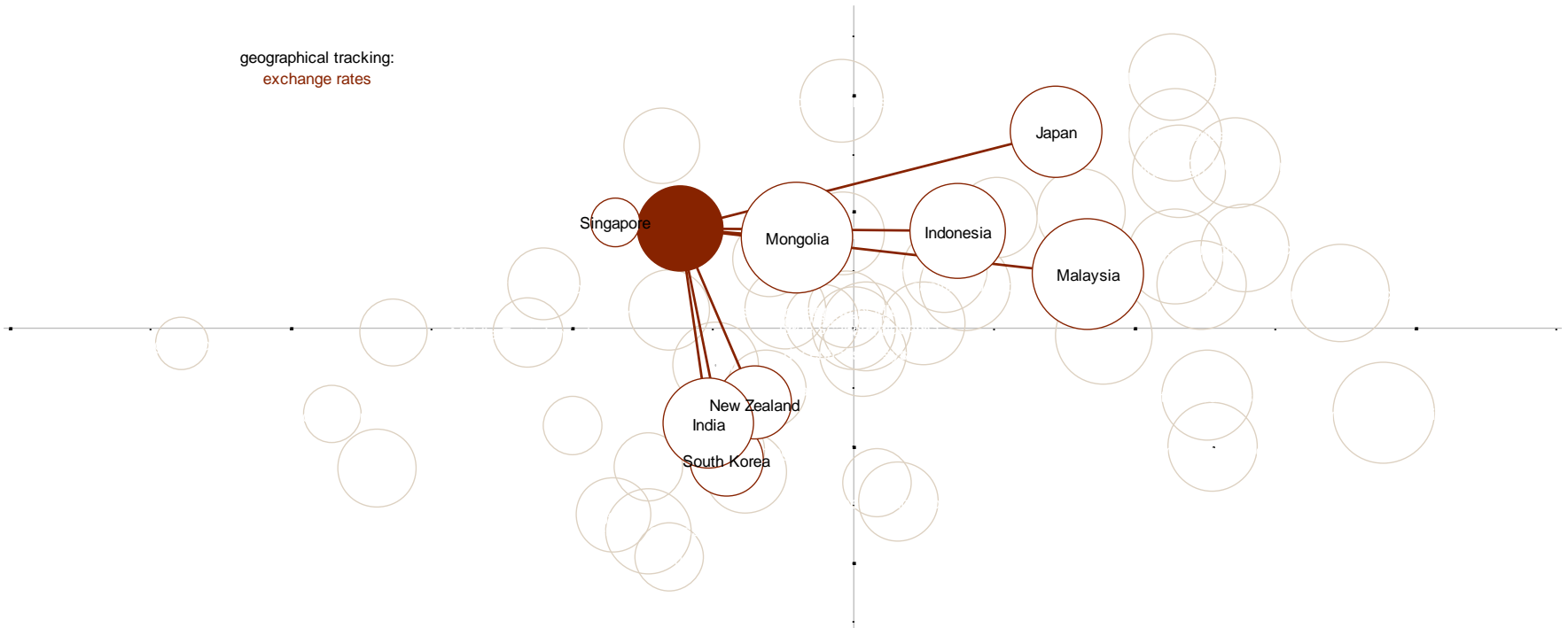
geographical tracking:
decommissioning



World Energy Issues Monitor 2018

New Zealand – Exchange Rates

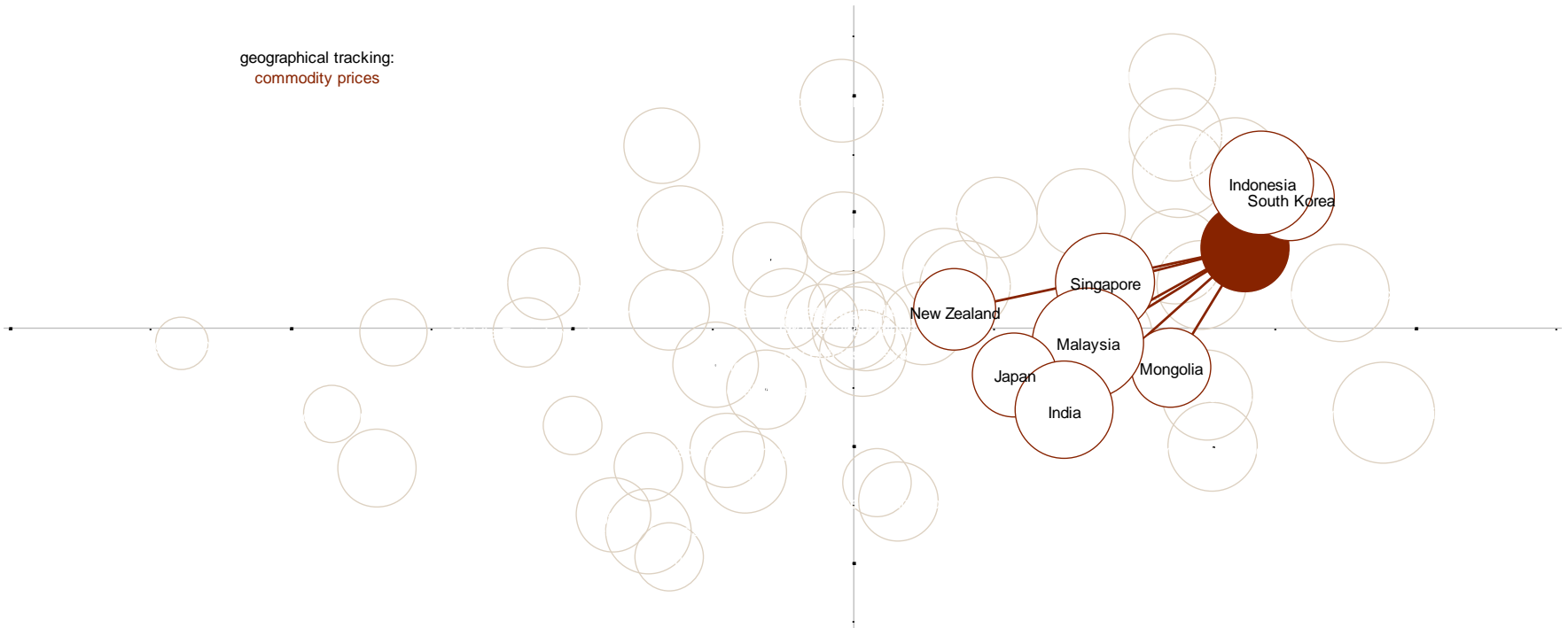
geographical tracking:
exchange rates



World Energy Issues Monitor 2018

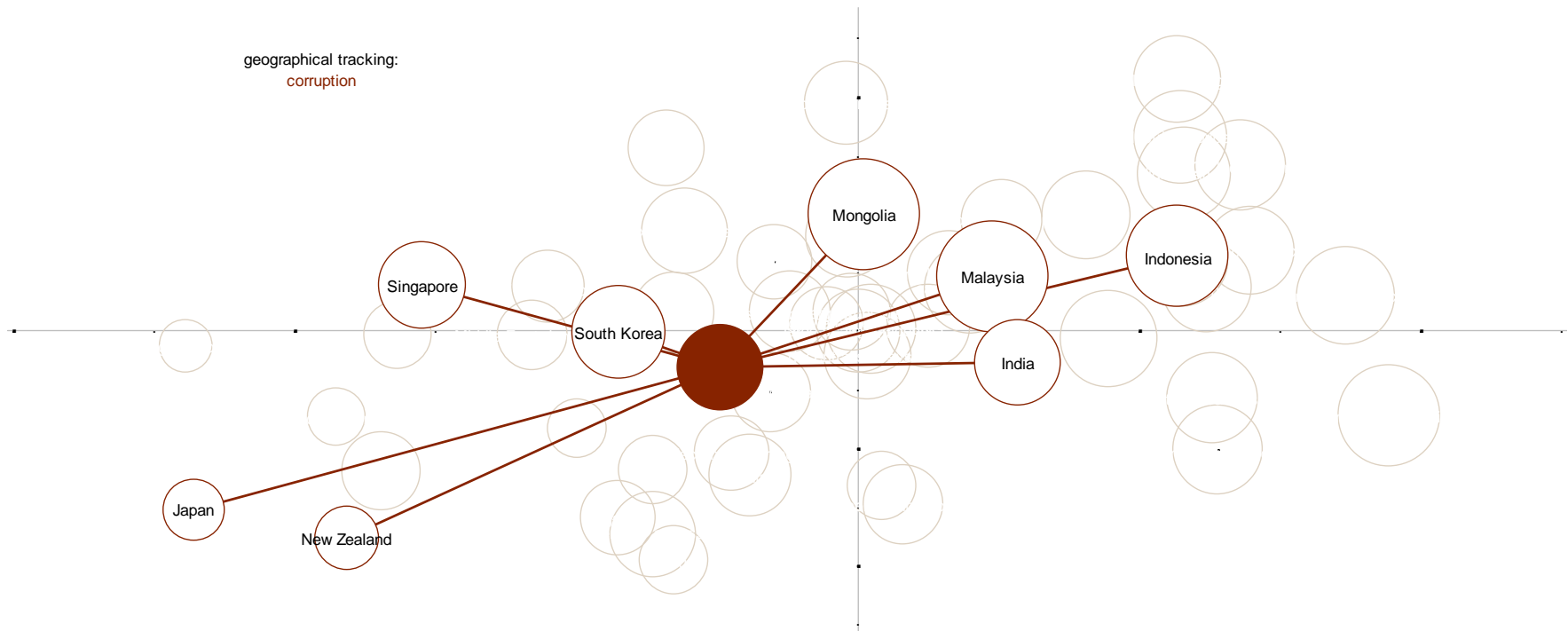
New Zealand – Commodity Price

geographical tracking:
commodity prices



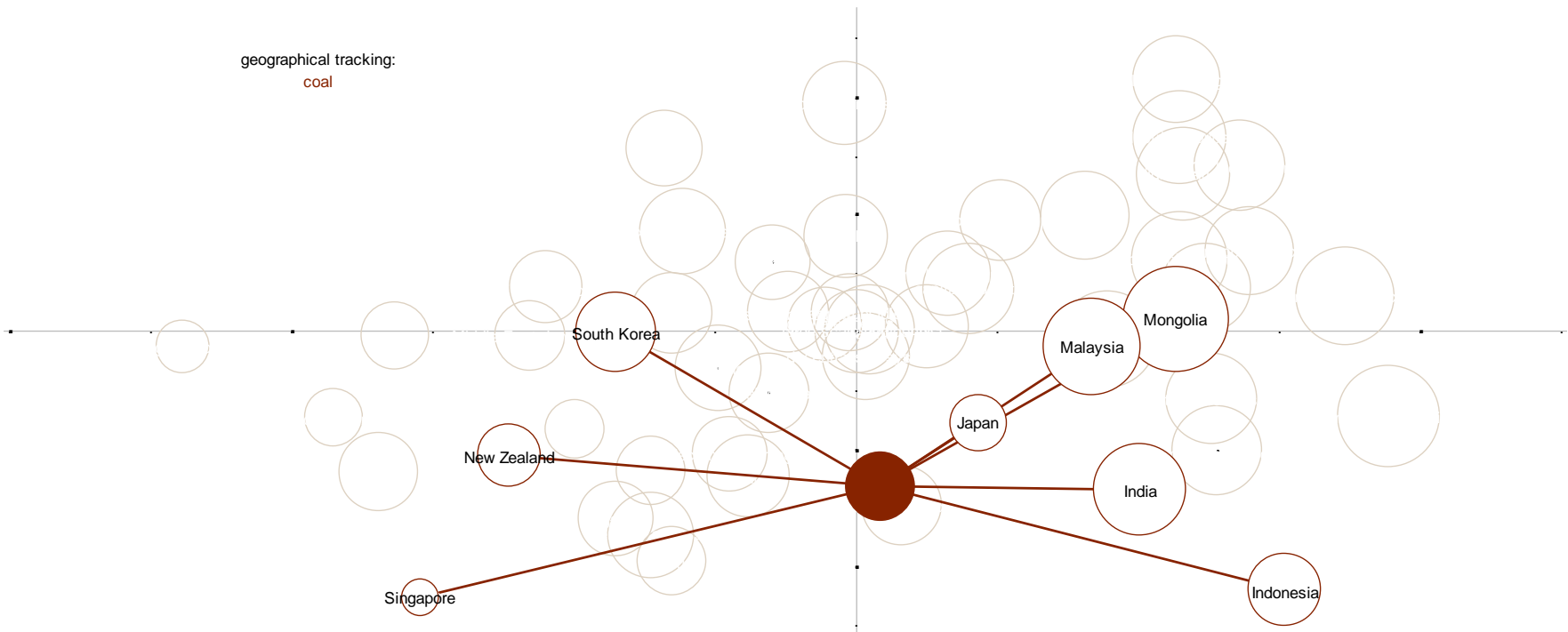
World Energy Issues Monitor 2018

New Zealand – Corruption



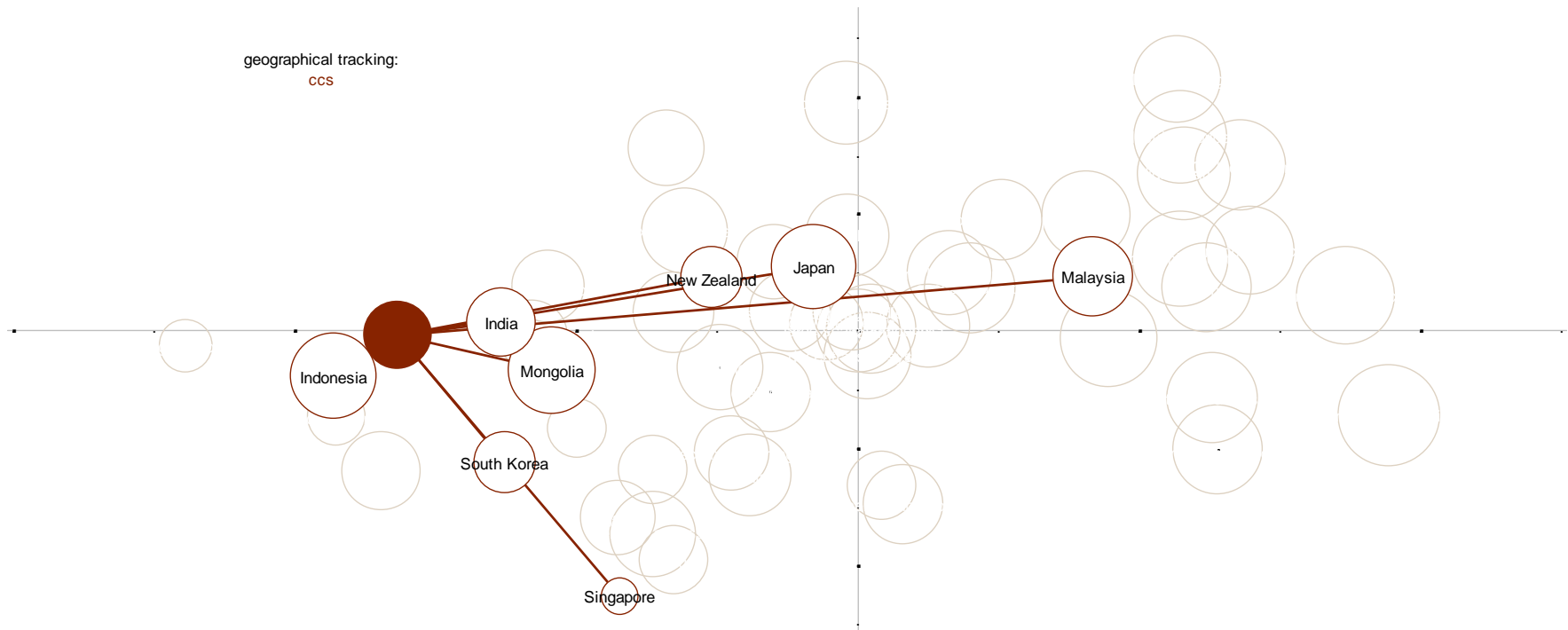
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New Zealand – Coal



World Energy Issues Monitor 2018

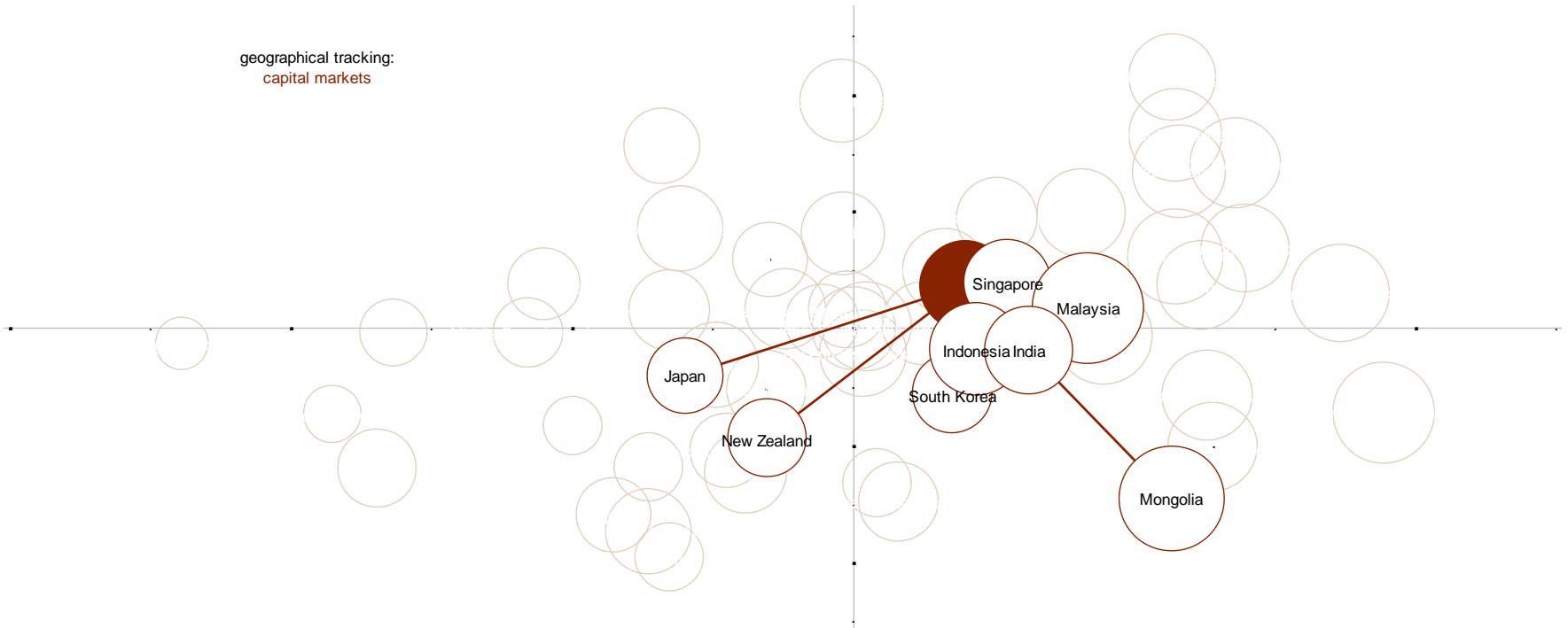
New Zealand – CCS



World Energy Issues Monitor 2018

New Zealand – Capital Markets

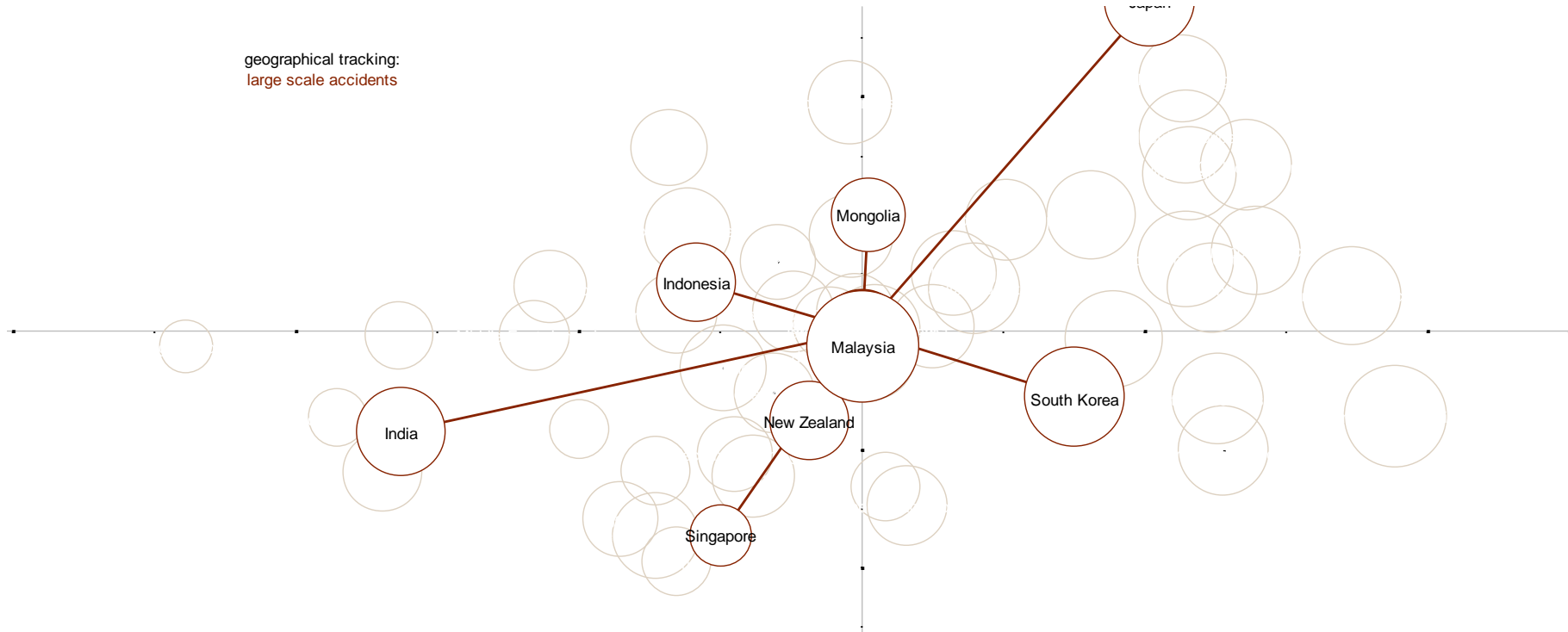
geographical tracking:
capital markets



World Energy Issues Monitor 2018

New Zealand – Large Scale Accident

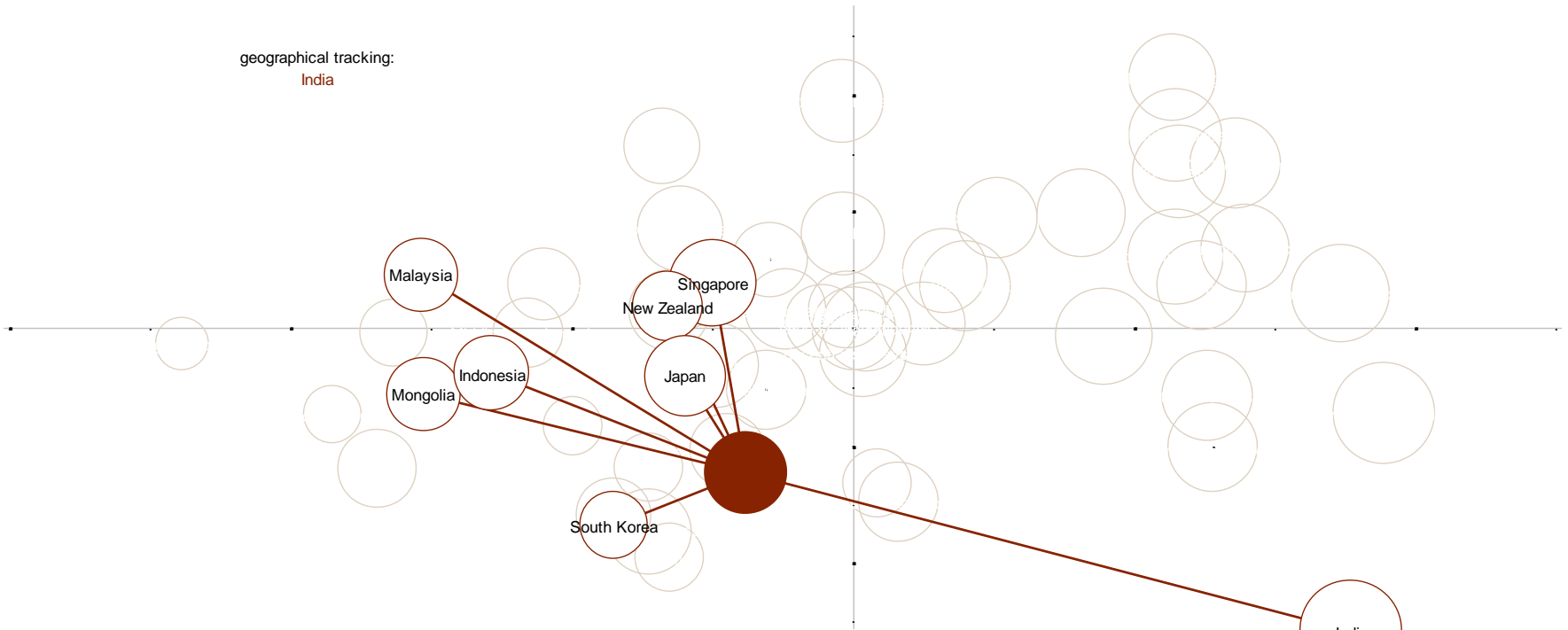
geographical tracking:
large scale accidents



World Energy Issues Monitor 2018

New Zealand – India

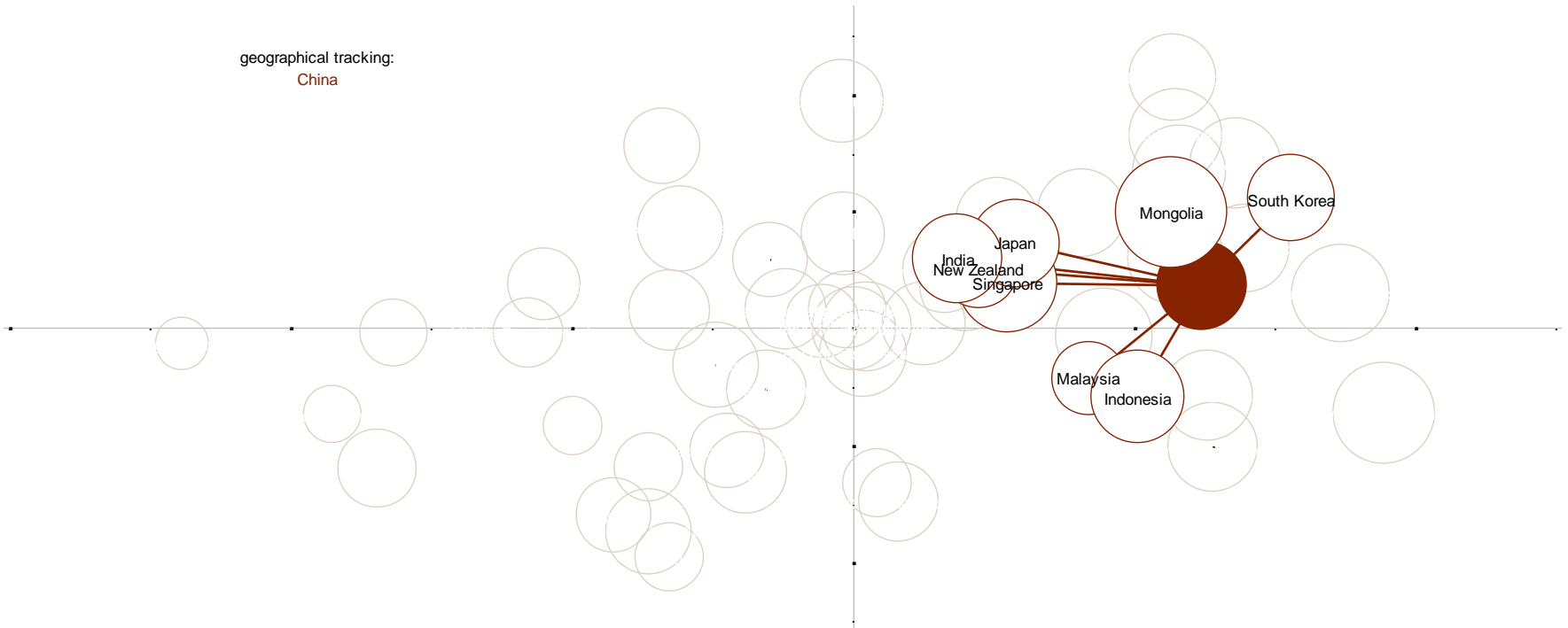
geographical tracking:
India



World Energy Issues Monitor 2018

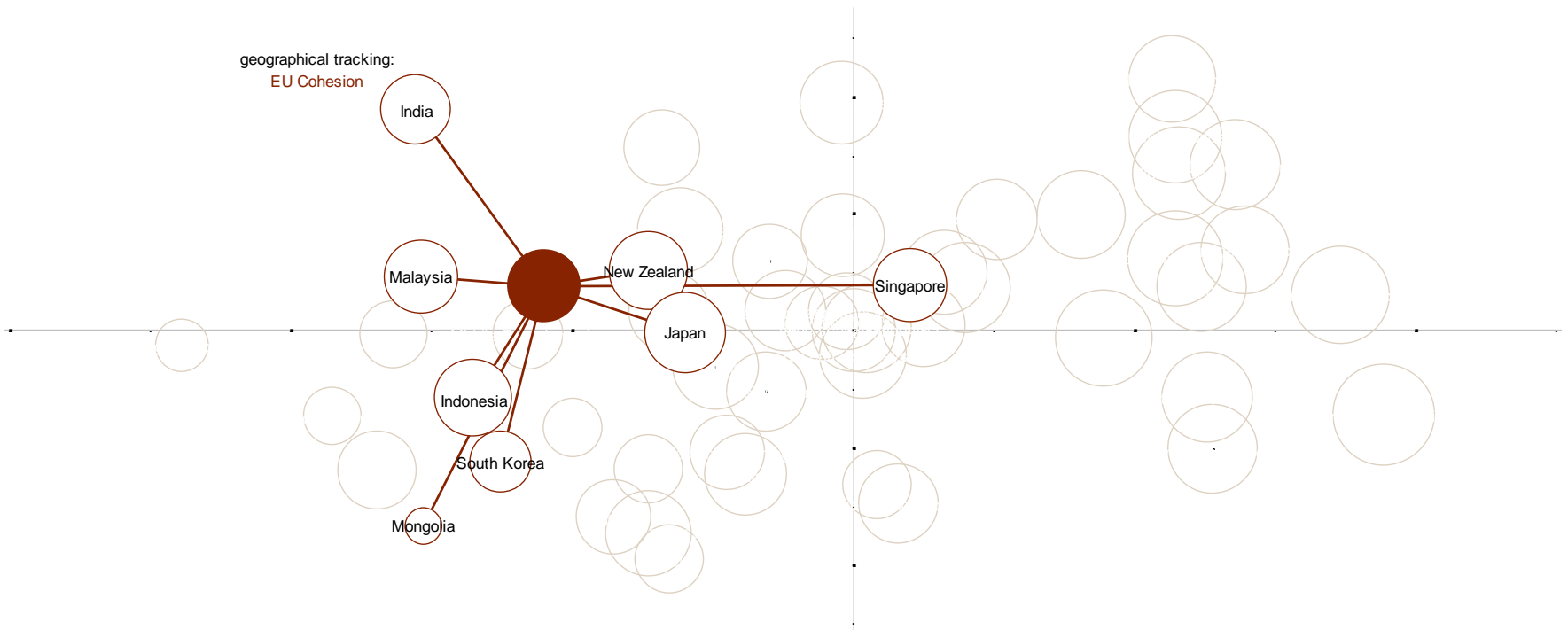
New Zealand – China

geographical tracking:
China



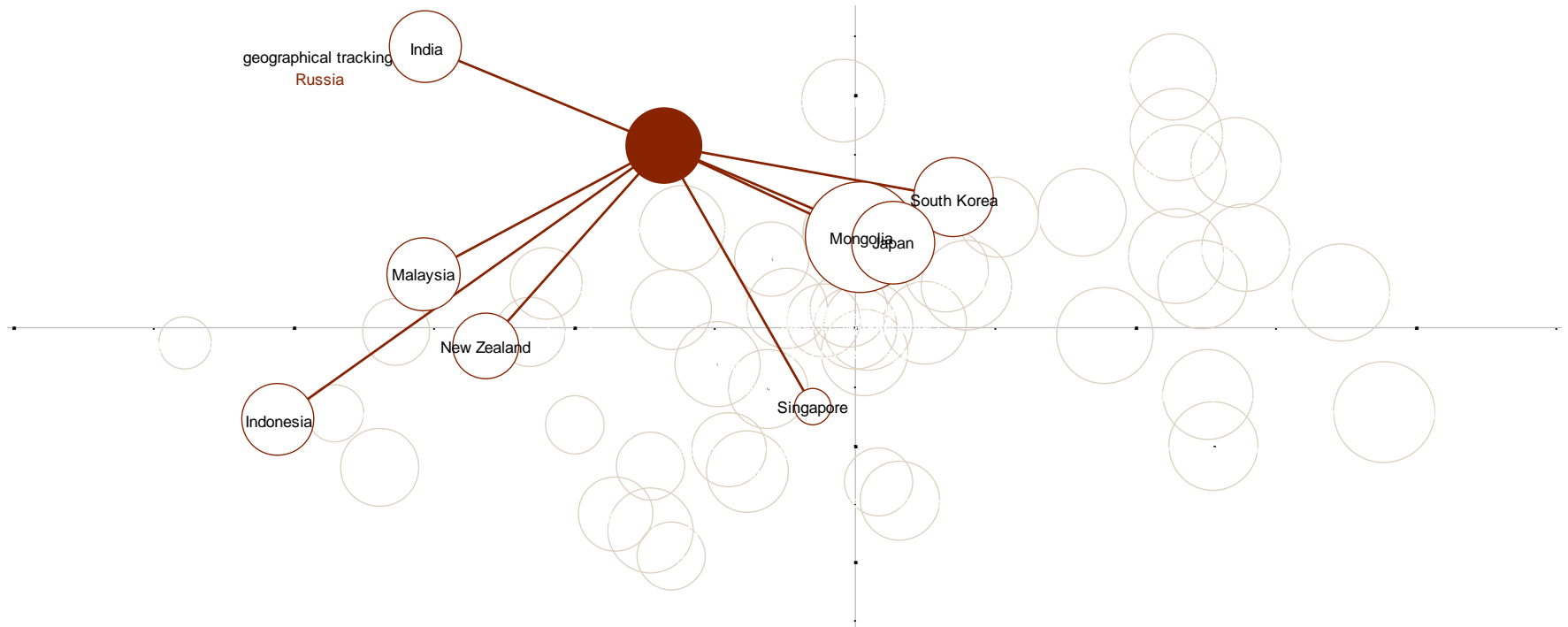
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New Zealand – EU Cohesion



World Energy Issues Monitor 2018

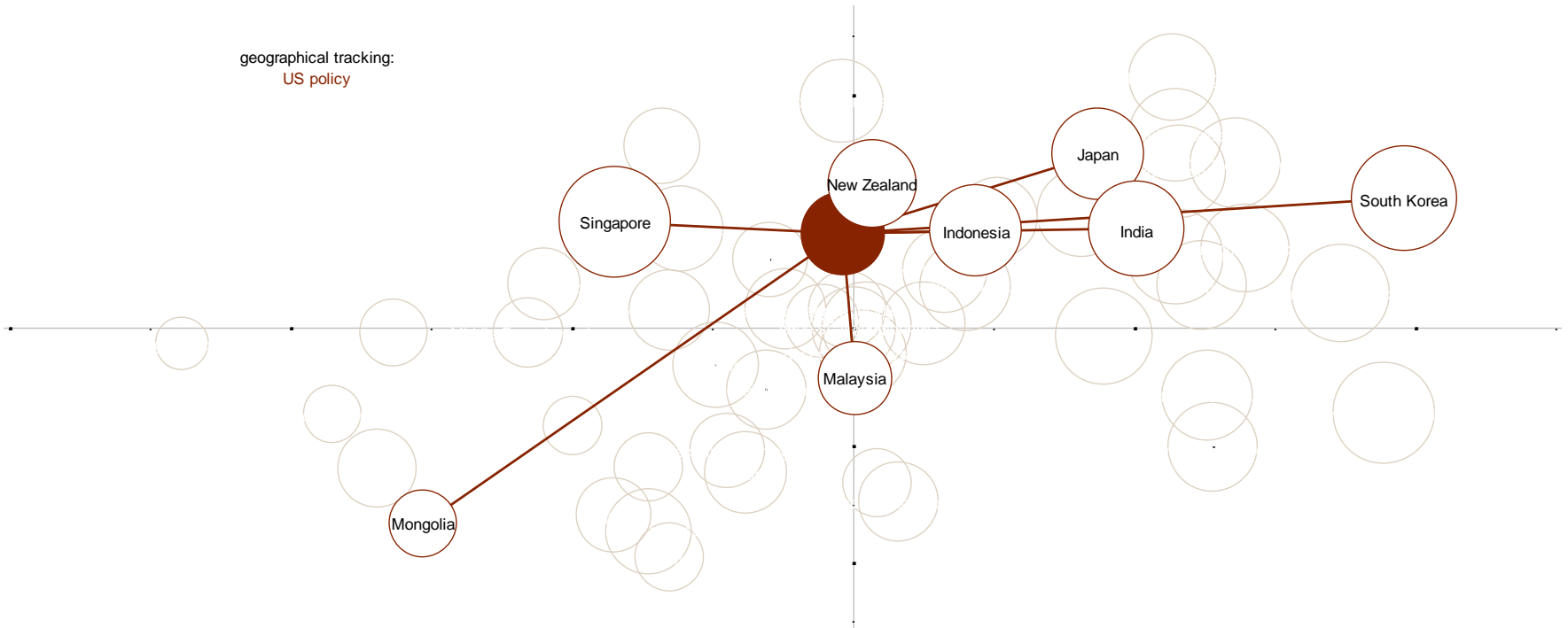
New Zealand – Russia



World Energy Issues Monitor 2018

New Zealand – US Policy

geographical tracking:
US policy



End

For questions please contact Tina Schirr
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