

How renewable energy can be a vehicle for resilient communities and economy in Queensland

Queensland's plan for renewables uptake

QLD energy and jobs plan

- RET of 70% by 2032
- Key infrastructure projects
- 13GW wind and solar and \$13 Bilion investment from 2022 - 2030

Queensland Government

Department of Energy and Public Works



The crisis of the world system¹

- 1. The ecological crisis there is no planet B.
- 2. The crisis of inequity the gap between the poor and rich
- 3. The crisis of meaning the search for something beyond material goods
- 4. The crisis of work AI and automation
- 5. The crisis of governance governance beyond nation state boundaries
- 6. The crisis of inclusion who is or isn't a member of The Club?

1. The invisible hand or inclusive flow? The Futures of the world system by Sohail Inayatulluah. July 2021, Journal of Futures Studies <u>https://jfsdigital.org/2021/07/01/the-invisible-hand-or-inclusive-flow-the-futures-of-the-world-system/</u>



Safe and secure communities

What it includes (but not limited to)

- Guaranteed access to necessities for life (food, shelter, clothing education, healthcare)
- ✓ Healthy local economy and jobs
- Expectations of relative peace and trust
- Ecology (being in balance with our ecosystems)
- Equity and inclusion (access for all)
- Healthy governance (decision making and power)
- Meaning, identity and purpose (community spirit)



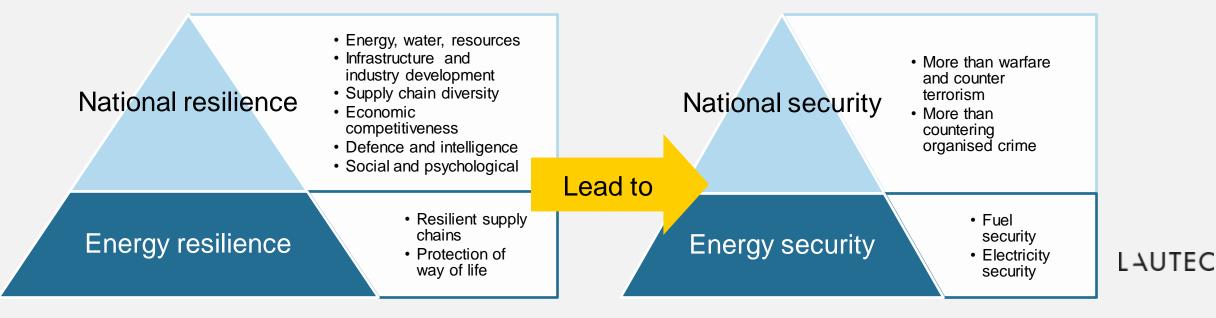
Security is an outcome of resilience

National security is more than Defence and policing

- ✓ National resilience is more than climate and disaster risk. It can also include
 - Energy, water and resource security
 - Infrastructure and industry development
 - Diversity and economic competitiveness
 - Defence and intelligence
 - Social and psychological resilience
- National resilience as an aggregate of community and individual resilience

Energy security has a social dimension

- It is more than "cheap" free market supply of electricity and fuels
- Requires investment in areas of sovereign risk
- Considers common societal challenges that the free market doesn't address
- Seeks to protect our way of life



Local economy

Keep the money rolling locally

- Secondary industry/processing for raw materials and primary industries
- Technologies that give opportunity for local industries and businesses
- Keeping ahead of the innovation curve if we can't compete on price

Opportunities in renewables for QLD local economies include

- Decentralised solar gives opportunity to local businesses
- Green metals from local green hydrogen
- Recycling and circular economy as an opportunity to rent our minerals, rather than sell them
- New equity models ownership as a buffer against the crisis of work



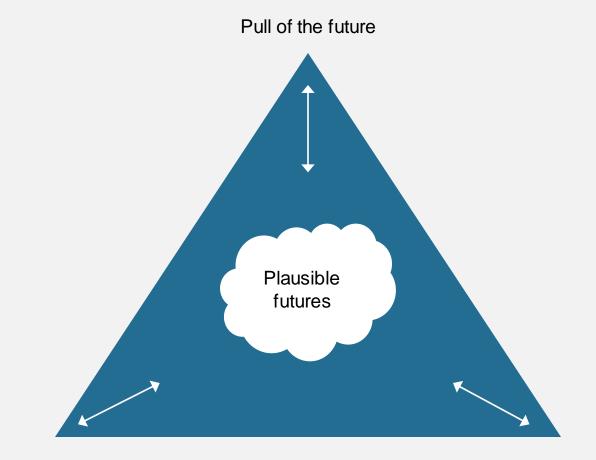
The futures triangle for energy

Drivers (paradigm shifts, push of the present)

- Energy transition
- From top down to de-centralised
- On vs off grid
- Seller to the grid vs energy for self-sufficiency
- New equity models
- Renting minerals/circular economy

Barriers (weight of the past)

- ✓ NEM technical rules
- How money is made from the NEM model
- Political will and finance
- Regulations and role of government



Push of the present

Weight of the past

Pull?

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Paradigms of change

No change, marginal change, adaptive change and radical change scenarios

FOUR FUTURES ¹	MEMBERS ONLY	MEMBERSHIP EXPANDS	THE NEW CLUB	AFTER THE CLUB
MEASUREMENT	Single bottom line – GDP	Triple bottom line	Quadruple bottom line	Beyond the bottom line
SYSTEMIC CHANGES	Large corporations Crises continue and contradictions are enhanced	Inclusive corporations Rise of East Asia The next industrial revolution Technology is used to disrupt and change the rules	Platform cooperatives Global government Renewable energy Spiritual identity The Prama – dynamic equilibrium – economy	Star Trek economy Abundance Work = Design and conflict resolution Monitoring Al
WORLDVIEW	Neo-liberal capitalism	Stakeholder capitalism	Cooperative progressive/Wellbeing	Co-creation
METAPHOR	The invisible hand	Inclusion saves the day	All on a journey together	Flow

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Energy paradigms

The four futures reimagined

FOUR FUTURES	MEMBERS ONLY	MEMBERSHIP EXPANDS	THE NEW CLUB	AFTER THE CLUB
MEASUREMENT	Single bottom line – GDP	Triple bottom line	Quadruple bottom line	Beyond the bottom line
SYSTEMIC CHANGES	Large corporations own Energy Generation Infrastructure DNSPs as gatekeepers for rooftop solar	Inclusive corporations New energy technologies Community partnerships Energy consumption consciousness Reduced/efficient energy use	Platform energy cooperatives Self-sufficiency and microgrids Integrated Community Energy Systems (ICES) and circular economy Appropriate balance for centralised/ decentralised and on/off grid New ownership models	Star Trek energy economics Consumers as co- creators and users of energy, Internet of Things Monitoring AI
WORLDVIEW	Neo-liberal capitalism	Stakeholder capitalism	Cooperative progressive/Wellbeing	Co-creation
METAPHOR	The invisible hand	Inclusion saves the day	All on a journey together	Flow

For more information (and innovative solutions)

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Collaborative spatial planning tools



Daily project reporting tools



Consulting and advisory



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