

National Disaster Resilience Strategy

Rautaki ā-Motu
Manawaroa Aituā



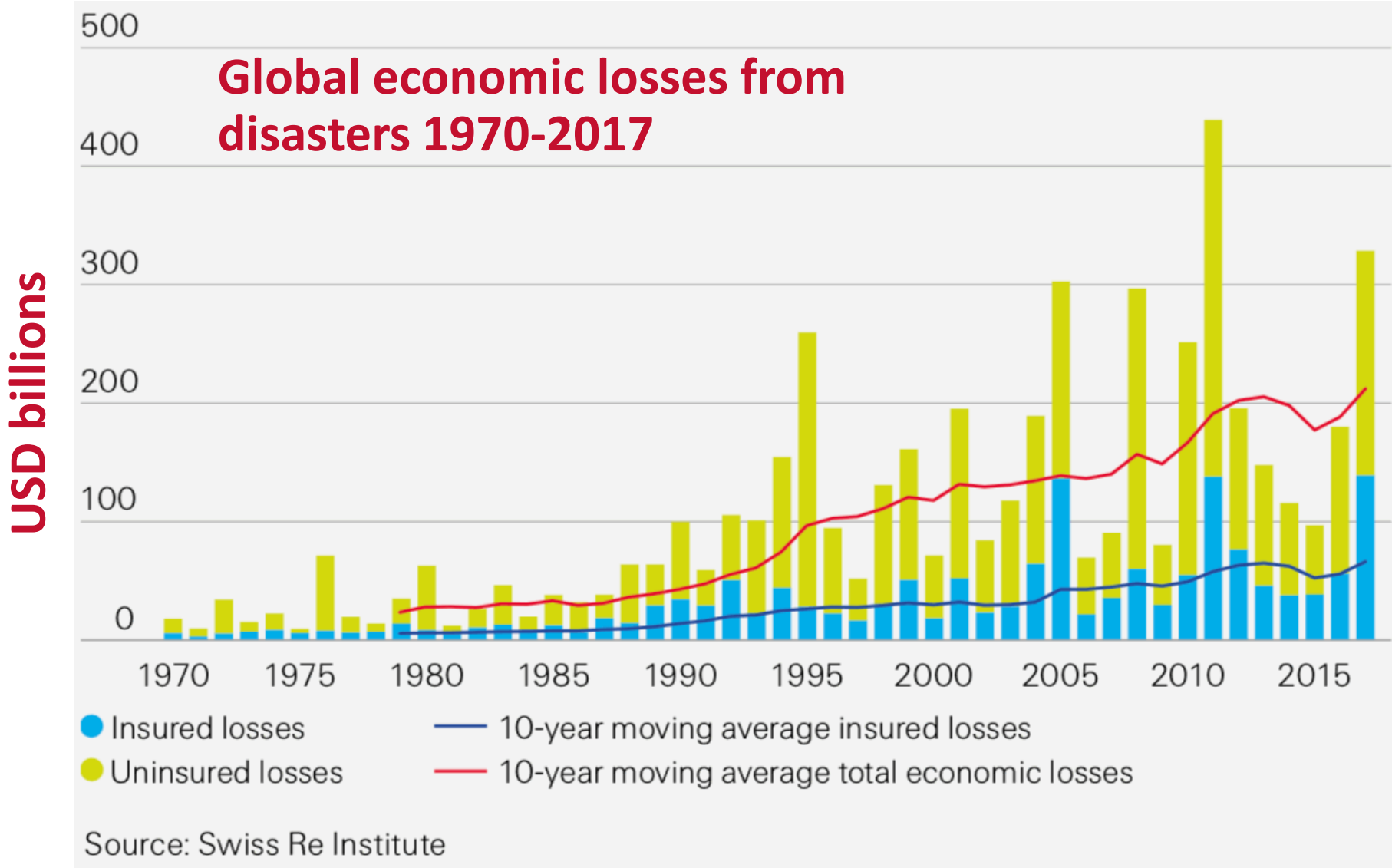
**Why all this hype about
resilience anyway?!**

1

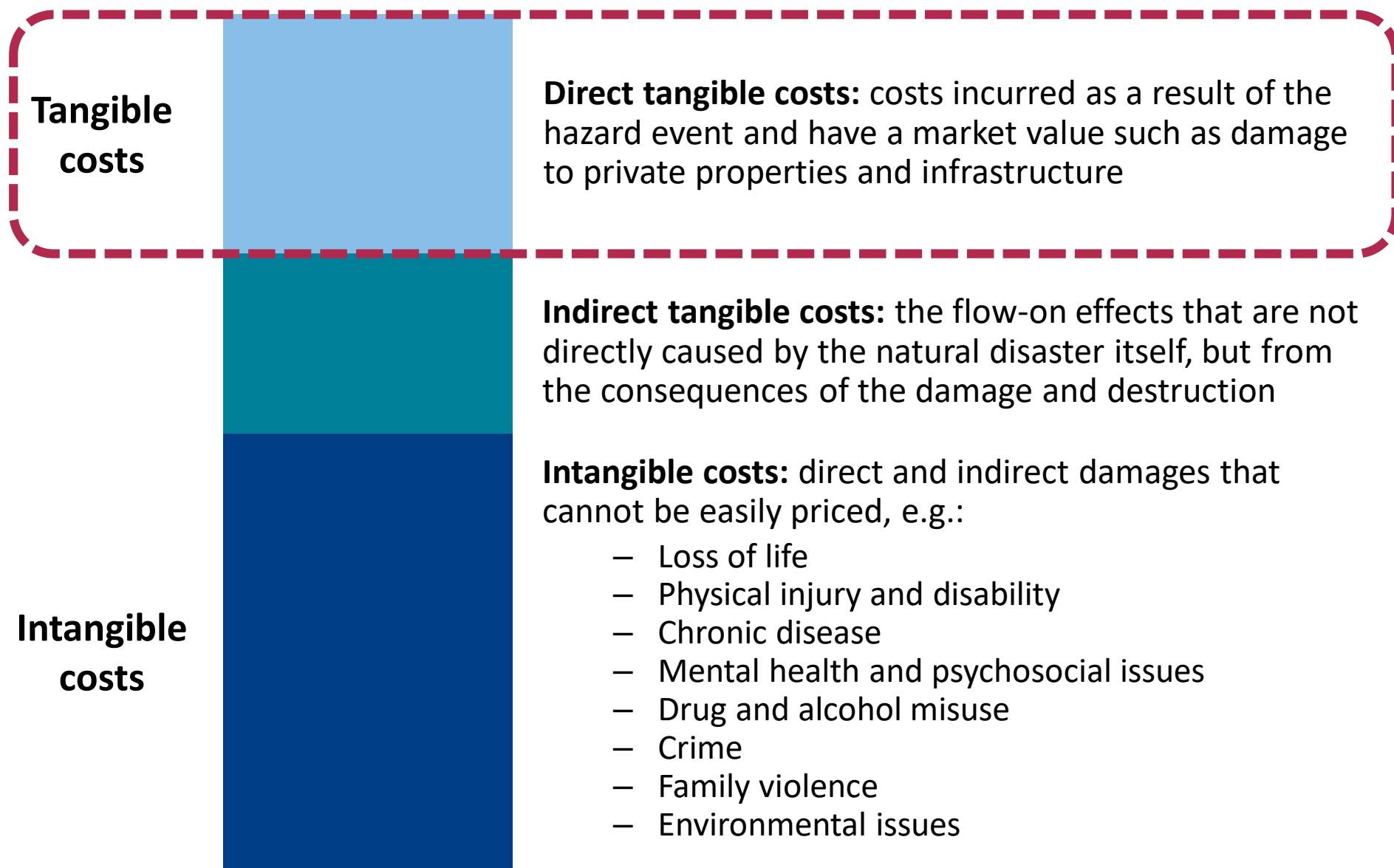
Disasters cost us more than we think



The cost of disasters is growing and the portion absorbed by governments and its citizens are even greater...



Understanding the true cost of disasters



A large, semi-transparent grey number '2' is positioned on the left side of the image. The background is a night-time photograph of a city with a wildfire in the background. The city lights are visible in the foreground and middle ground, while the wildfire is a bright orange and yellow glow on the hills in the background.

2

**We face many
risks, known
and unknown**

OUR INCREASING EXPOSURE



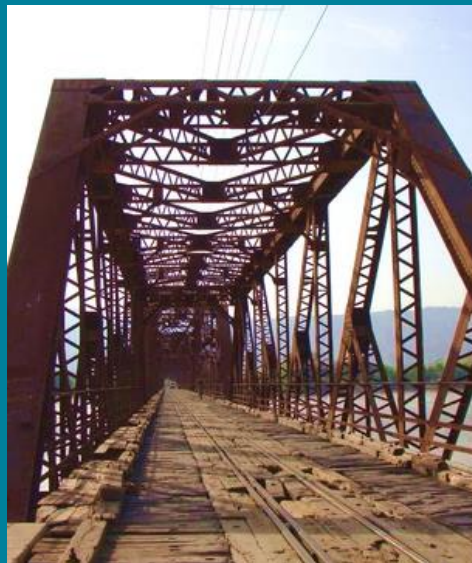
Our population is increasing, and changing in demographic makeup and diversity

We are adding to our built environment – buildings and infrastructure – at a rapid rate

We value and depend on an increasingly wide array of **products, services, and technology**

We have fought hard for **economic development, growth, prosperity, and wealth**

OUR VULNERABILITIES



Our population is ageing, has large migrant communities, and deprivation still exists in many areas.

Our existing building stock/infrastructure is also ageing. Bridges, roads, railways, ports, water supply and the electrical grid all have weaknesses.

People are living in **increasingly marginal locations**, particularly around the coast.

The budget climate means **government and communities must do more with less.**

**We live in an age
of uncertainty**

3





**The future holds
new operating
modes**

4



Life 3.0

- Unprecedented connectivity and data richness
- AI, VR, AR, and other enabling technology
- Growth of the sharing economy
- The changing balance of power between institutions and individuals
- Blurred roles between public sector, private sector, and civil society; the drive for 'shared value'
- Becoming super-diverse
- And more...

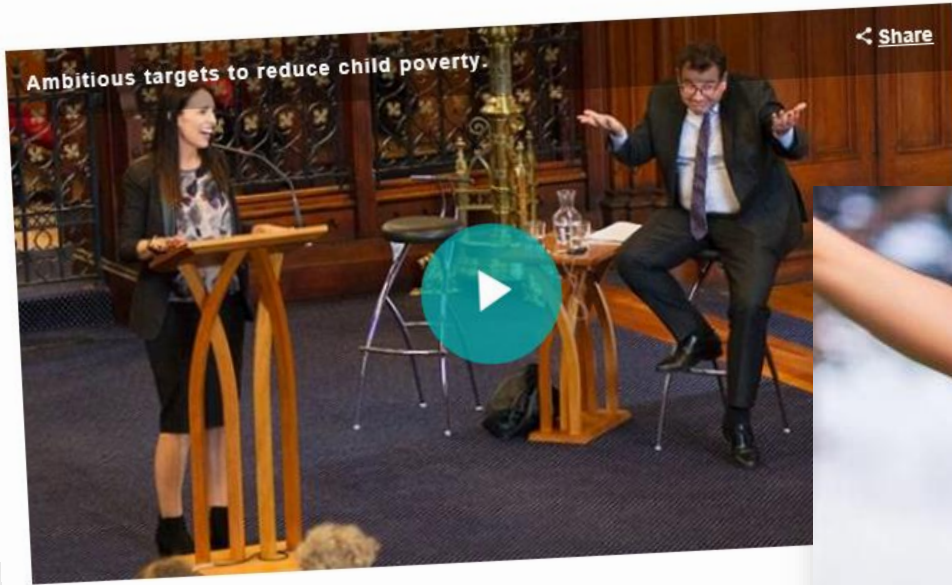
**The Government is
prioritising wellbeing**

5



NZ Government to lead world in measuring success with wellbeing measures

Laura Walters · 16:32, Feb 01 2018



Jacinda Ardern sets ambitious targets to reduce child poverty.

New Zealand plans to be the first in the world to measure its success how it does socially, culturally and environmentally.

During her first major public address of the year, Prime Minister Ardern said her Labour-led Government wanted to go further than the measures it had announced this week.

By the 2019 Budget, it would introduce a tool and framework to measure the wellbeing of New Zealanders a measure of our economic success

Wellbeing an elusive prize as Labour's budgetary pressures mount

Patrick Smellie · 05:00, Apr 05 2018



Wellbeing Budget 2019

7 MAY 2019

The Wellbeing Budget on 30 May is about tackling New Zealand's long-term challenges. It will do this by focussing on five priorities:

- Taking mental health seriously
- Improving child wellbeing
- Supporting Maori & Pasifika aspirations
- Building a productive nation
- Transforming the economy

Who's creating a framework for thinking about New Zealand's future?

We are. LGNZ.

Our five strategic policy priorities

Policy Statement 2017 – 2019



1. INFRASTRUCTURE

Ensuring infrastructure and associated funding mechanisms are in place to allow for growth and maintenance across housing, building, transport, broadband, tourism-related infrastructure, and control infrastructure.

2. RISK AND RESILIENCE

Understanding natural hazards and infrastructure risks to the economy.

3. ENVIRONMENTAL

Leading and working alongside stakeholders to increase impact including climate change, quantity of New Zealand resources, and

4. SOCIAL

Working alongside central government and iwi to address social issues and needs in our communities including an ageing population, disparity between social (housing) safety.

The welcome return of the four wellbeings to local govt law

Tracy Hicks - 12:00, May 10 2019



DAVID WALKER/STUFF

Local Government Minister Nanalia Mahuta: the four well-beings are back.

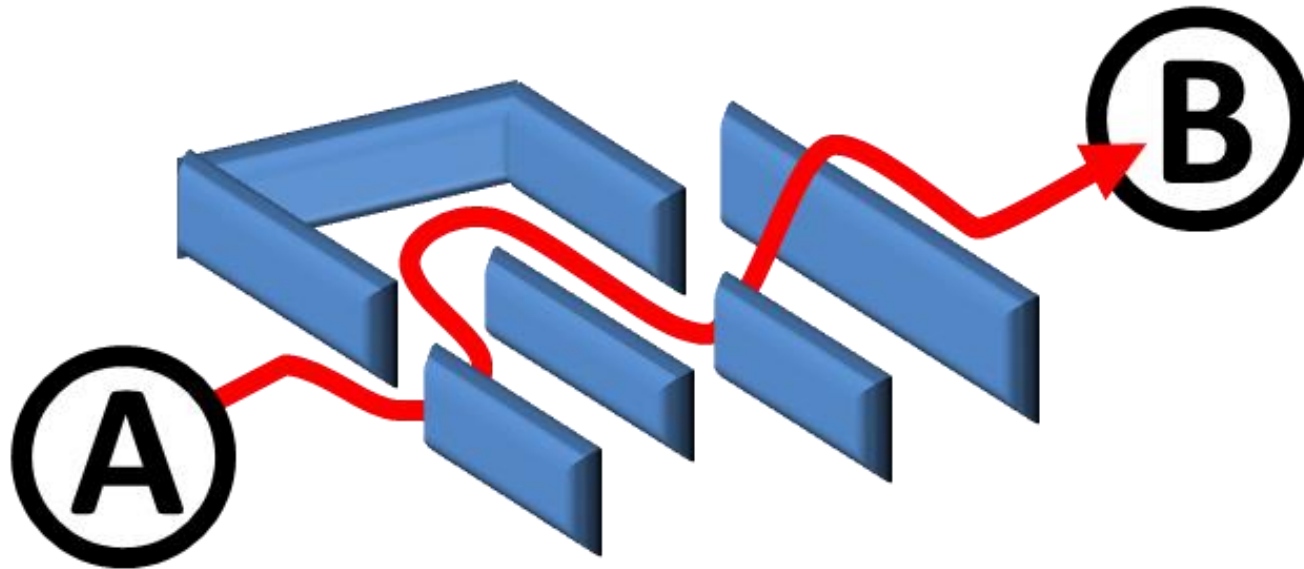
OPINION: I guess it's not unusual to either see or expect governments to place their stamp on policy direction. Nevertheless, it was reassuring to this week see the Government agree to re-insert what has been referred to as the 'four wellbeings' into the Local Government Act after an absence of a decade. This provides a mandate for councils to consider the effect all its decisions will have on the overall wellbeing of the community. Sounds like simple common sense to me.



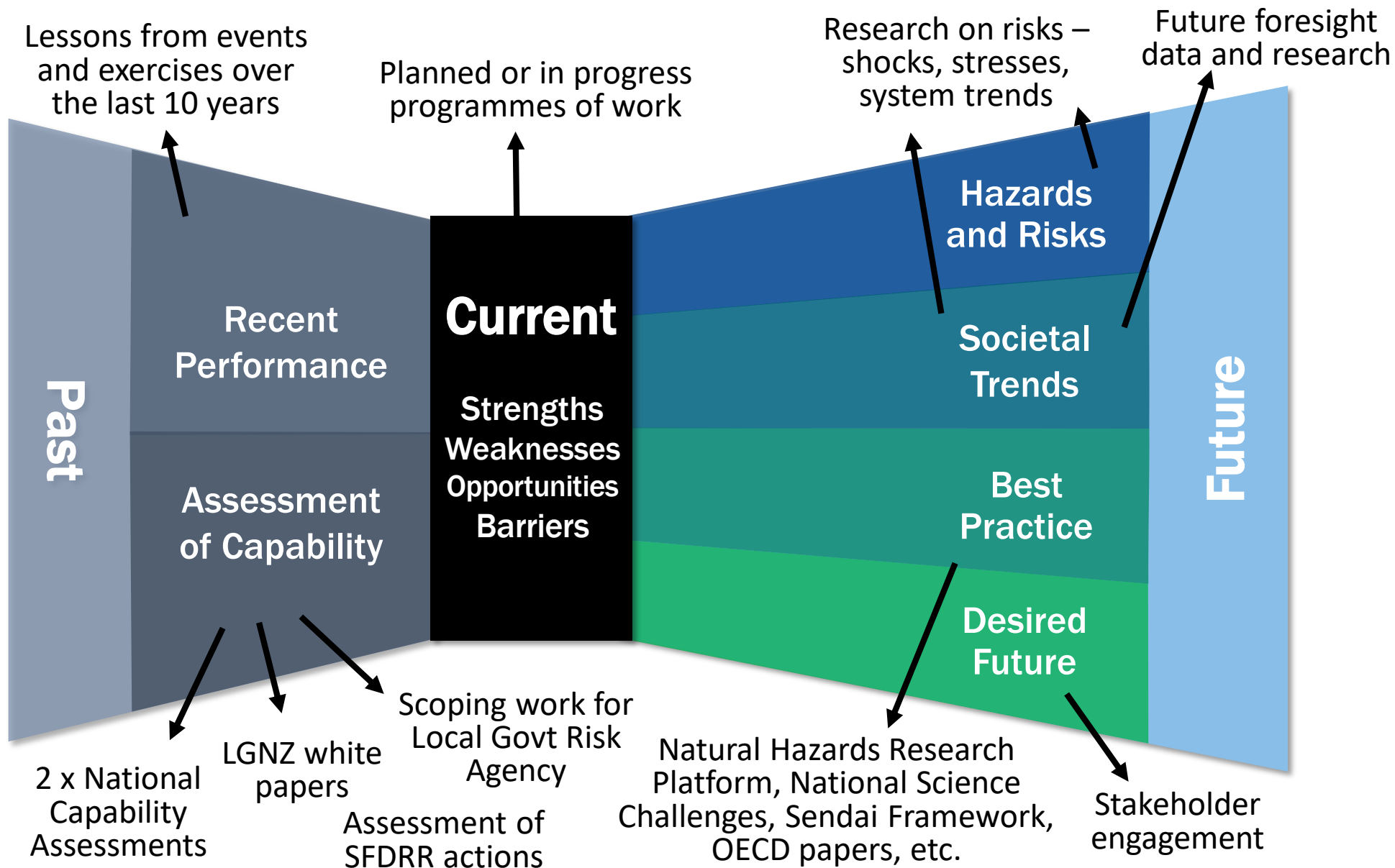
Developing a new strategy

A good strategy

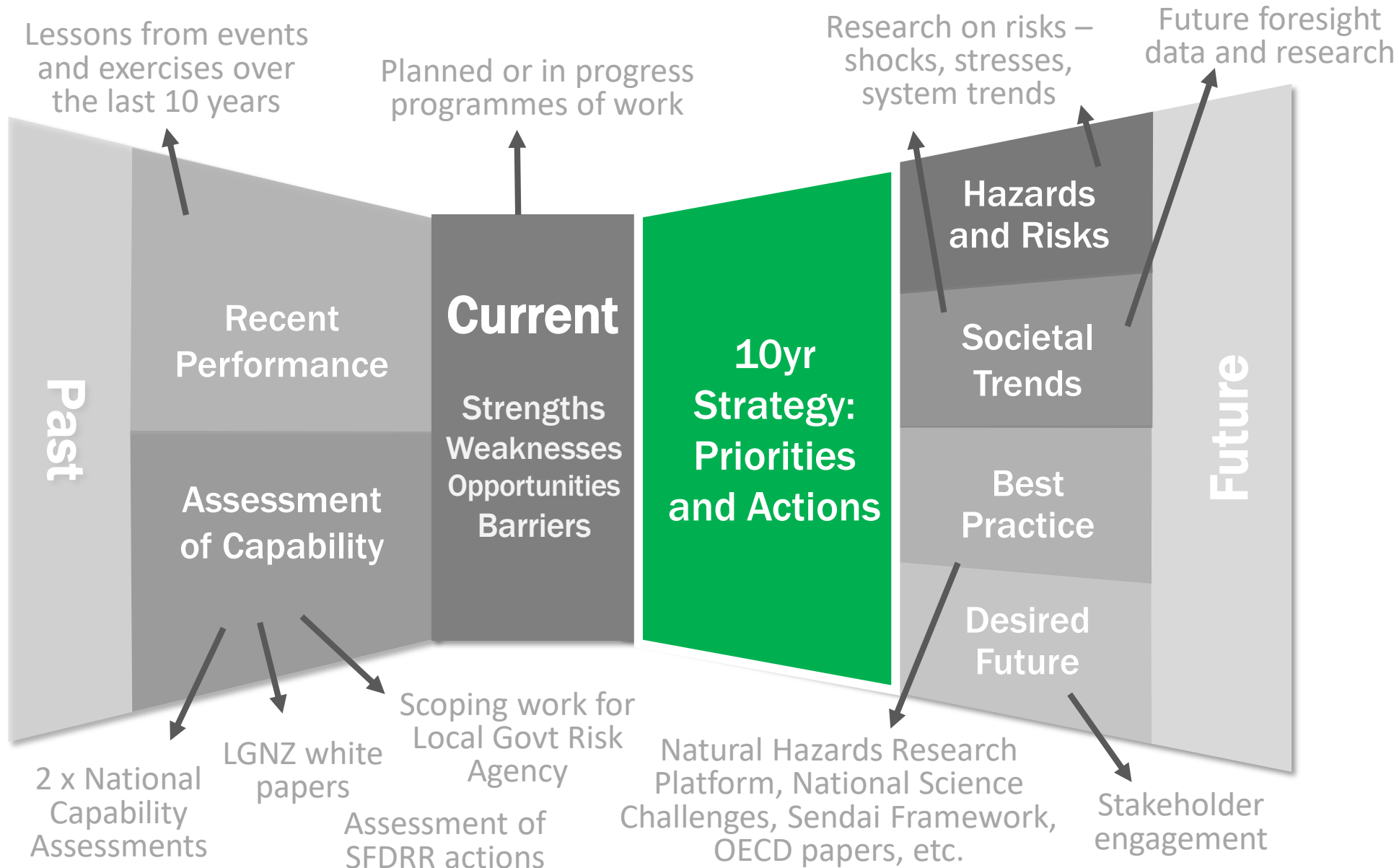
= a diagnosis, a guiding policy, and coherent action



Considering a new Strategy: the evidence



Considering a new Strategy: the evidence



"connectivity & embracing technology"

"resilience is a way of life for businesses"

"greater lifeline functional redundancy"

"establish relationships in communities before needed"

"trust in leadership, in the process, and"

"resources are treasured – Te Ao Maori"

"everybody has a part to play"

nation
mean to you?

"harness and enable community action, rather than direct and control it"

"transform data into"

"culture of resilience is embedded"

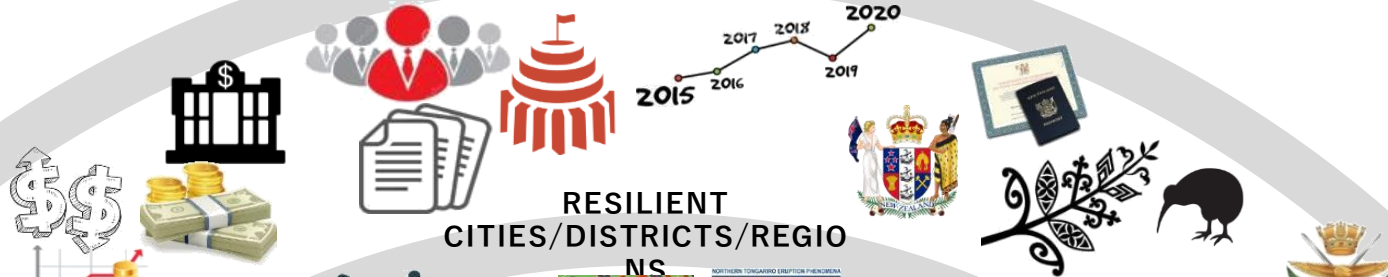
"buildings and infrastructure are more resilient to shocks and stresses"

"land use reduces our exposure over time"



What makes us resilient to disasters?

SUPPORTIVE & ENABLING GOVERNMENT & SOCIETY



RESILIENT CITIES/DISTRICTS/REGIONS



RESILIENT COMMUNITIES



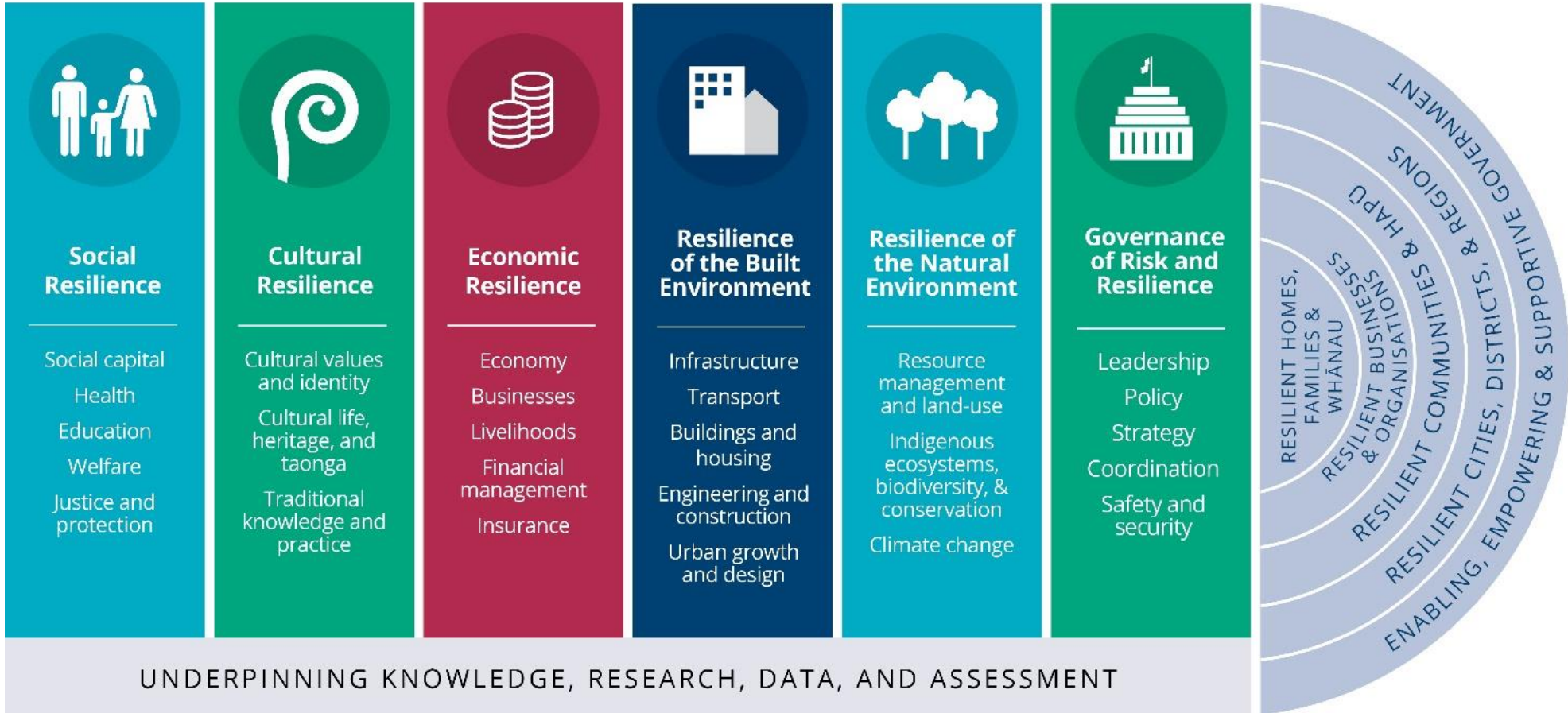
RESILIENT BUSINESSES & ORGANISATIONS



RESILIENT HOMES



Model of a Resilient Nation



**Putting it all together:
National Disaster
Resilience Strategy**

National Disaster Resilience Strategy

Rautaki ā-Motu Manawaroa Aituā

We all have a role in a disaster resilient nation
He wāhanga tō tātau katoa i roto i te iwi manawaroa aituā



Rautaki ā-Motu Manawaroa Aituā

He wāhanga tō tātau katoa i roto i te iwi manawaroa aituā

National Disaster Resilience Strategy
National Disaster Resilience Strategy - I...

Introduction

Ministry of Civil Defence & Emergency Management

国家抗灾战略的目的

该战略的目的是为新西兰的民防局受民防应急管理管辖，该法：

- 通过有助于人们安全和福祉
- 在管理风险的过程中，鼓励
- 对紧急情况的发生、应对及
- 要求地方政府通过各方区域
- 为整合国家和地方的预案和
- 鼓励广大机构的跨机构协作。

我们将这一切概括为一个总体目
这一点非常重要，因为新西兰人
我们现在和将来所面临的许多危
突发的和难以预测的事件是不可
重要的必备条件。具有抗灾能力是



国家抗灾战略

전략의 목표

위험관리라는 우선과제를 진전시키기 위한 모든 레벨에서의 6 개 목표:

- 1 위험 시나리오(위해 요소, 노출도, 취약성)를 평가하고, 위험 관리 전략을 수립하고, 의사결정 자료로 사용
- 2 위험 경감에 대해 이해하고 행동하기 위한(지역사회와 관청에서 파악하는)
- 3 위험 평가 능력을 비롯해 위험 인식,
- 4 위험 경감 정책의 미비점을 보완(핵
- 5 불필요하거나 용인되지 않는 위험이 자연환경에서 개발 및 투자를 할 때
- 6 자난과 혼란의 경제적 영향 및 복원 유도하는 자금 조달 메커니즘을 피

비상사태에 대한 효과적인 대응과 회복이라는

- 7 주민들의 안전과 복리를 비상관리



국가 재난 복원의 전략

Taiala Aoao e Faafu
Malosi mai Faalava
Matua

राष्ट्रीय आपदा रिसिलियेन्स
(लचीलापन) कार्यनीति

A large illustration of a disaster resilient community, similar to the main illustration, showing houses, a school, a bus, a tractor, and a port.

Vision of a resilient New Zealand

He matakitenga o te Aotearoa manawarao

A future resilient New Zealand is a nation where resilience thinking is integrated into all aspects of life as a matter of course. There is a deep, shared understanding of a wide range of risks and the nature of the action that each of them requires. From an individual level, to families and whānau, communities and hapū, cities and districts, and at a national level, everyone understands their own share of responsibility for reducing risk and strengthening resilience. A strong understanding of risk and resilience is also an integral part of business culture. The integration of these parts builds a risk-savvy, resilient nation.

Strong leadership has created a coherent, joined-up approach to resilience that connects with several government departments and organisational mandates. Communities are empowered to problem solve and adapt. At a national level, a long-term resilience strategy and the associated capacities and governance structures are in place. There is a constant flow of up-to-date, evidence-based information on best practice. This supports the capacity for local, site-specific, and innovative responses. Rich information flows make it possible for communities to identify and connect resources and use them where they are most needed.

New Zealand communities and neighbourhoods are well-connected by face-to-face interaction and digital networks. There are shared values and social norms in relation to resilience that support a whole-of-society approach. At the same time, resilience thinking connects with, draws on and permeates all cultures in New Zealand. People make the connection between resilience and their own culture, values, traditions, and sense of identity and place.

New Zealand takes a proactive, anticipatory, smart approach to limit impacts before they happen, understanding that action up-front limits costs later. This includes taking steps to mitigate the risks of climate change, and to adapt to change already taking place. Tough issues are tackled through collective conversation and action.

Resilience is integrated into urban and rural design principles as a matter of course and supported by quality information on safe building materials and design. Rich data and modelling of hazard and risk are enabling the transition to smart land-use, where permanent dwellings and key infrastructure are not built on the highest risk ground.

Response to emergencies is characterised by an end-to-end system that supports cooperative and coordinated emergency management, and timely, accurate, and relevant information that enables the public to understand the situation and take action to protect themselves and others, and limit damaging and costly flow-on effects.

New Zealand as a whole is able to have informed debate about the optimal level of resource to invest to ensure all aspects of recovery, including economic recovery, are smooth and swift. Recovery from emergencies is comprehensive, participatory, and inclusive of all peoples and organisations, having had discussions about priorities, processes, and desired outcomes before emergencies happen.



In summary, as a nation, we understand we live in a country exposed to hazards, but we also understand the range of actions to take to limit impacts and ensure the hazards, crises, and emergencies we will inevitably face do not become disasters that threaten our prosperity and wellbeing.

Our Goal



To strengthen the resilience of the nation, by:

1 Managing Risks

2 Effective Response to and Recovery From Emergencies

3 Enabling, Empowering, and Supporting Community Resilience

18 objectives give effect to the goal:

1 Managing Risks

1. Identify and understand risk scenarios (including the components of hazard, exposure, vulnerability, and capacity), and use this knowledge to inform decision-making
2. Put in place organisational structures and identify necessary processes – including being informed by community perspectives – to understand and act on reducing risks
3. Build risk awareness, risk literacy, and risk management capability, including the ability to assess risk
4. Address gaps in risk reduction policy (particularly in the light of climate change adaptation)
5. Ensure development and investment practices, particularly in the built and natural environments, are risk-aware, taking care not to create any unnecessary or unacceptable new risk
6. Understand the economic impact of disaster and disruption, and the need for investment in resilience; identify and develop financial mechanisms that support resilience activities

2 Effective Response to and Recovery From Emergencies

7. Implement measures to ensure that the safety and wellbeing of people is at the heart of the emergency management system
8. Build the relationship between emergency management organisations and iwi/groups representing Māori, to ensure greater recognition, understanding, and integration of iwi/Māori perspectives and tikanga in emergency management
9. Strengthen the national leadership of the emergency management system to provide clearer direction and more consistent response to and recovery from emergencies
10. Ensure it is clear who is responsible for what, nationally, regionally, and locally, in response and recovery; enable and empower community-level response, and ensure it is connected into wider coordinated responses, when and where necessary
11. Build the capability and capacity of the emergency management workforce for response and recovery
12. Improve the information and intelligence system that supports decision-making in emergencies to enable informed, timely, and consistent decisions by stakeholders and the public

3 Enabling, Empowering, and Supporting Community Resilience

13. Enable and empower individuals, households, organisations, and businesses to build their resilience, paying particular attention to those people and groups who may be disproportionately affected by disaster
14. Cultivate an environment for social connectedness which promotes a culture of mutual help; embed a collective impact approach to building community resilience
15. Take a whole of city/district/region approach to resilience, including to embed strategic objectives for resilience in key plans and strategies
16. Address the capacity and adequacy of critical infrastructure systems, and upgrade them as practicable, according to risks identified
17. Embed a strategic, resilience approach to recovery planning that takes account of risks identified, recognises long-term priorities and opportunities to build back better, and ensures the needs of the affected are at the centre of recovery processes
18. Recognise the importance of culture to resilience, including to support the continuity of cultural places, institutions and activities, and to enable the participation of different cultures in resilience

EM leadership, roles, responsibilities, and comms

Partnership with iwi/Maori for EM

Individual, household, business preparedness

Risk assessment

Risk governance

Risk comms and capability

Climate change adaptation

Land use planning and development controls

Economics of risk and resilience

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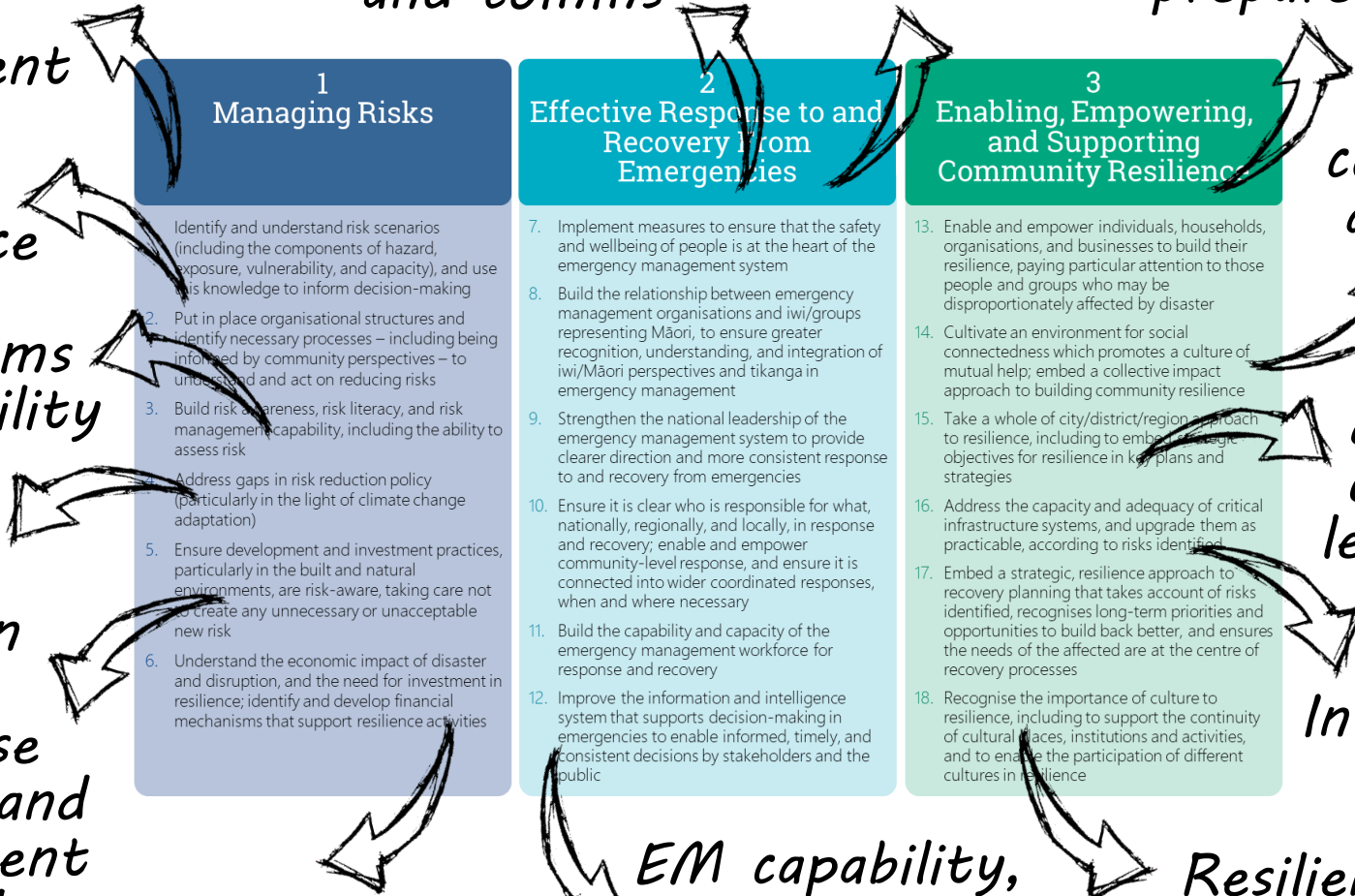
Community connectedness and capacity

Holistic approach to city/district level resilience

Infrastructure resilience

Resilience of cultural places and cultural life

EM capability, capacity, information and intelligence



So, what's different
about **this** Strategy
compared to **previous**
strategies?





It focuses strongly on **resilience**

The Strategy promotes resilient practices at all levels, from individuals and families/whānau, businesses and organisations, communities and hapū, cities, districts and regions, and Government and national organisations

It is explicit that
the purpose of
resilience is the
**protection of
wellbeing and
prosperity**

The Strategy puts the wellbeing of people and communities at its core, to ensure our investment in resilience pays dividends for all our people.



It encourages us to be **'risk-informed'**

The Strategy is concerned with identifying and monitoring risks to our wellbeing, taking action to reduce our existing levels of risk, minimise the amount of new risk we create, and ensuring that everyone has the information, and tools they need to be able to make informed decisions about resilience.





It builds a fit-for-purpose **emergency management system**

The Strategy embeds the Government's decisions on the Technical Advisory Group report *Better Responses...* to ensure we have an emergency management system that is fit-for-purpose, capable, and future ready.



It promotes an
**inclusive 'whole
of society'**
approach where **'we
all have a role'**

The Strategy promotes an inclusive approach to strengthening societal resilience that connects with a range of agencies, sectors, communities, and hapū/iwi, for improved outcomes for New Zealanders.

2

more key ideas



1

TRIPLE DIVIDEND OF RESILIENCE

INVESTMENTS IN
DISASTER RISK
MANAGEMENT
AND RESILIENCE

1ST OBJECTIVE

1st Dividend of Resilience: Avoided Losses

Increased resilience reduces disaster losses by:

1. Saving lives
2. Reducing infrastructure damage
3. Reducing economic losses

Benefits
when
disasters
strikes

2ND OBJECTIVE

2nd Dividend of Resilience: Economic Development

Increased resilience unlocks suppressed economic potential and stimulates economic activity by:

1. Encouraging households to save and build assets
2. Promoting entrepreneurship
3. Stimulating businesses to invest and innovate

Benefits
regardless
of disaster

3RD OBJECTIVE

3rd Dividend of Resilience: Co-benefits

Beyond increasing resilience, disaster risk management investment also yields positive social, cultural, and environmental side-benefits ('co-benefits')



2

COLLECTIVE IMPACT

- 1. A common agenda**
Collectively defining the problem and creating a shared vision to solve it.
- 2. Shared measurement**
Agreeing to track progress in the same way.
- 3. Mutually reinforcing activities**
Coordinating collective efforts to maximize the end result.
- 4. Continuous communication**
Building trust and relationships among all participants.
- 5. A backbone organisation**
Having a team dedicated to orchestrating the work of the group.

BEFORE COLLECTIVE IMPACT

AFTER COLLECTIVE IMPACT



The Strategy is the “**basis for integration** of national and local activity and planning” (CDEM Act 2002)

- to make sure **we are all going in the same direction**, and all putting effort towards the same goals and objectives.



National Disaster Resilience Strategy

Rautaki ā-Motu
Manawaroa Aituā

We all have a role in a disaster resilient nation

He wāhanga tō tātau katoa i roto i te iwi manawaroa aituā





RESILIENCE TO NATURE'S CHALLENGES

Kia manawaroa
- Ngā Ākina o
Te Ao Tūroa

National
Science
Challenges



Resilient ORGANISATIONS



JOINT RESILIENCE OPERATING POLICY



Infrastructure
New Zealand

The Four Capitals

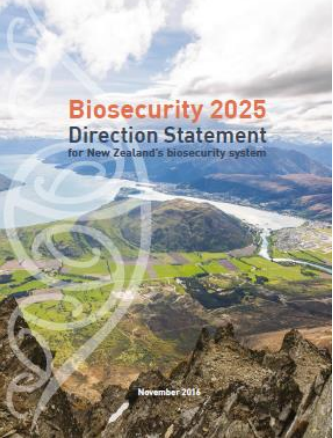
Interdependent wellbeing relies on the growth, distribution, and sustainability of the Four Capitals. The Capitals are interdependent and work together to support wellbeing. The Crown-Māori partnership is integral to all four capitals. The IOP is being continually developed and the next iteration of the framework will consider the role of tāwhiri, including Māori culture, as part of the equally important in-nature capital.

- Natural Capital:** The natural environment provides the raw materials and services needed to support life and human activity. It includes land, air, water, climate and oceans, as well as minerals and energy resources.
- Human Capital:** The economic, social, skills, knowledge and physical and mental health. These are the things which enable people to participate fully in work, study, recreation and a society where everybody thrives.
- Social Capital:** The trust and relationships between people and communities.
- Financial Capital:** The resources people have to live, work, trade, invest, consume, and enjoy. These are the things which enable people to participate fully in work, study, recreation and a society where everybody thrives.

Developing our energy potential

New Zealand Energy Strategy 2011-2021

New Zealand Energy Efficiency and Conservation Strategy 2011-2016



Reginal as at 8 August 2014

Building Act 2004
Public Act 2004 No 72
Date of assent: 24 August 2004
Commencement: see section 2

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2 Commencement	27
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6 Act binds the Crown	36

Reginal as at 12 September 2014

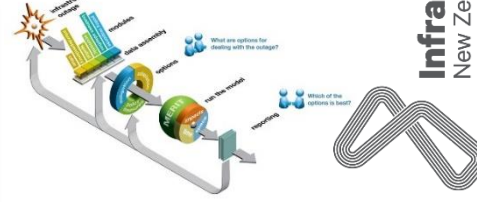
Resource Management Act 1991
Public Act 1991 No 69
Date of assent: 22 July 1991
Commencement: see section 1(2)

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1.6 Act to bind the Crown	36
1.7 Application of this Act to ships and aircraft of foreign States	37
Part 2 Purpose and principles	
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3 Matters of national importance	40

Reginal as at 1 August 2008

Earthquake Commission Act 1993
Public Act 1993 No 84
Date of assent: 22 July 1993
Commencement: see section 1(2)

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Affording Our Future

STATEMENT ON NEW ZEALAND'S LONG-TERM FISCAL POSITION

2013-2014

National Infrastructure Plan 2011

National Disaster Resilience Strategy
Rautaki ā-Motu
Manawaroa Aitua

We all have a role in a disaster resilient nation
He wāwhanga tā āraua kaōka i tōtō i te iwi manawaroa āitua

Our Vision New Zealand is a disaster resilient nation that acts proactively to manage risks and build resilience in a way that contributes to the wellbeing and prosperity of all New Zealanders.

Our Goal To strengthen the resilience of the nation so:

1. Managing risks
2. Effective response to and recovery from emergencies
3. Enabling empowering, and supporting community development

QuakeCoRE
NZ Centre for Earthquake Resilience
Te Hiranga Rū



Working Towards Higher Living Standards for New Zealanders

New Zealand Treasury Paper 11/02
May 2011

Tiakiina Aotearoa
Protect New Zealand

The Biosecurity Strategy for New Zealand

REDUCING RISK BUILDING RESILIENCE

EOC

Reginal as at 17 October 2002

Climate Change Emergency Management Act 2002
Public Act 2002 No 33
Date of assent: 17 October 2002
Commencement: see section 1

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1.6 Matters of national importance	6

New Zealand Health Strategy
Future direction

All New Zealanders
live well
stay well
get well

Adapting to Climate Change in New Zealand

Recommendations from the Climate Change Adaptation Technical Working Group

Wellington Resilience Strategy



COLLECTIVE IMPACT

1. **A common agenda**
Collectively defining the problem and creating a shared vision to solve it.
2. **Shared measurement**
Agreeing to track progress in the same way.
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5. **A backbone organisation**
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BEFORE COLLECTIVE IMPACT

AFTER COLLECTIVE IMPACT





Roadmap of Actions

Actions to implement the Strategy priorities and objectives:

- For the Strategy as a whole
- Organisationally/by sector

Questions of scope, detail, and balance

(what is 'guiding' and 'driving', but not 'directive', or 'prescriptive'?)





Measuring and monitoring regime

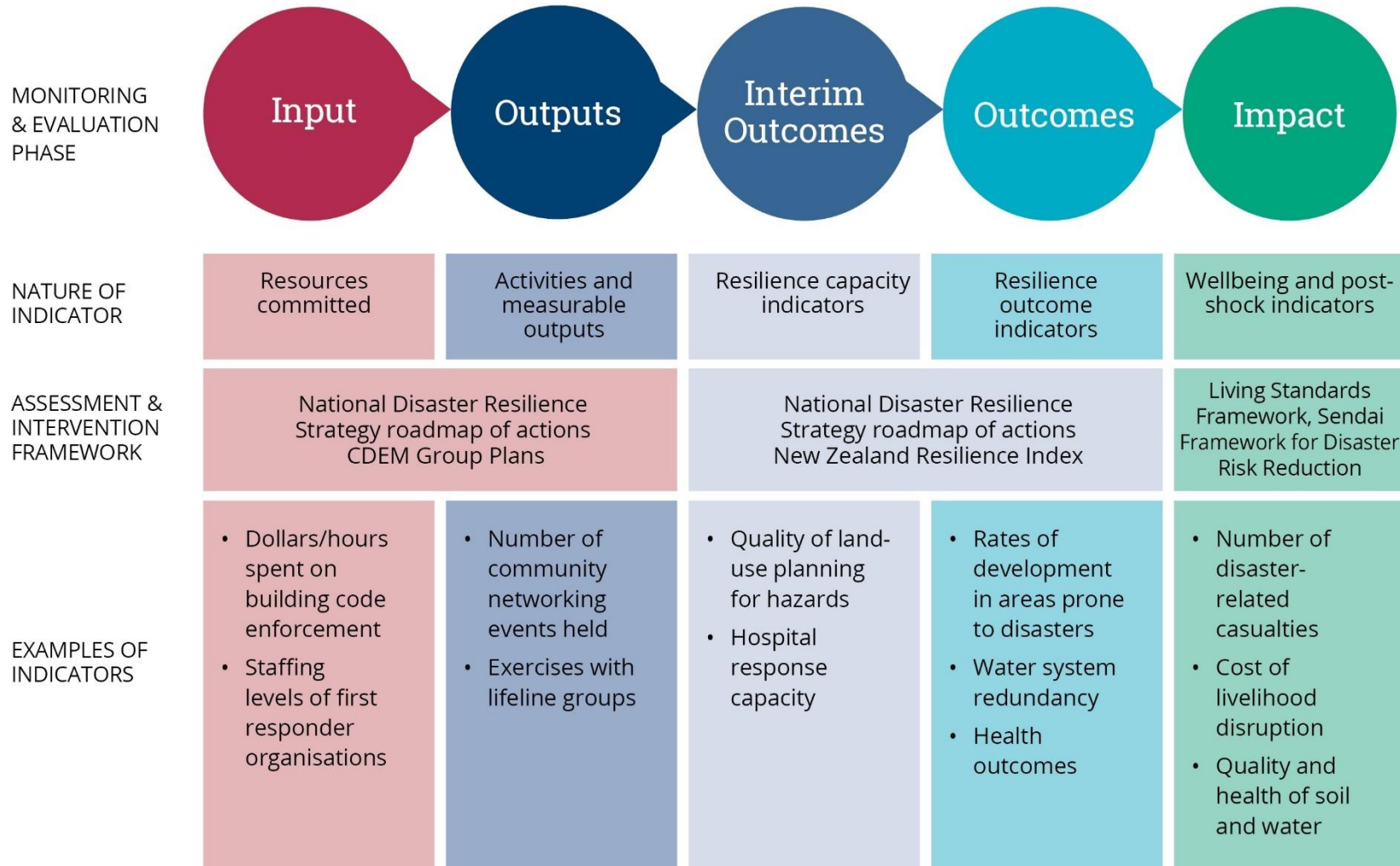
How are we doing?

Are we doing the right things?



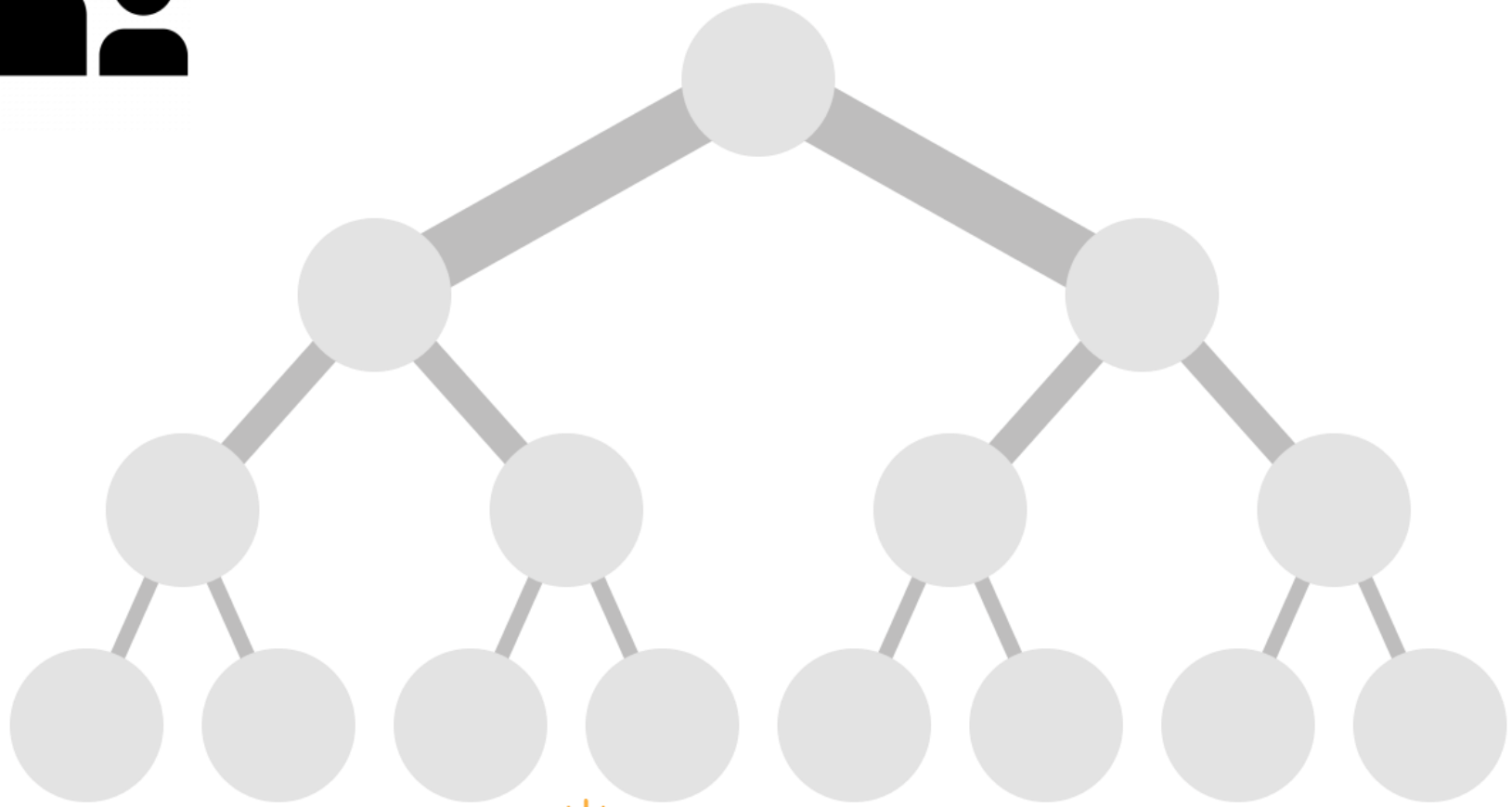


Measuring and monitoring regime



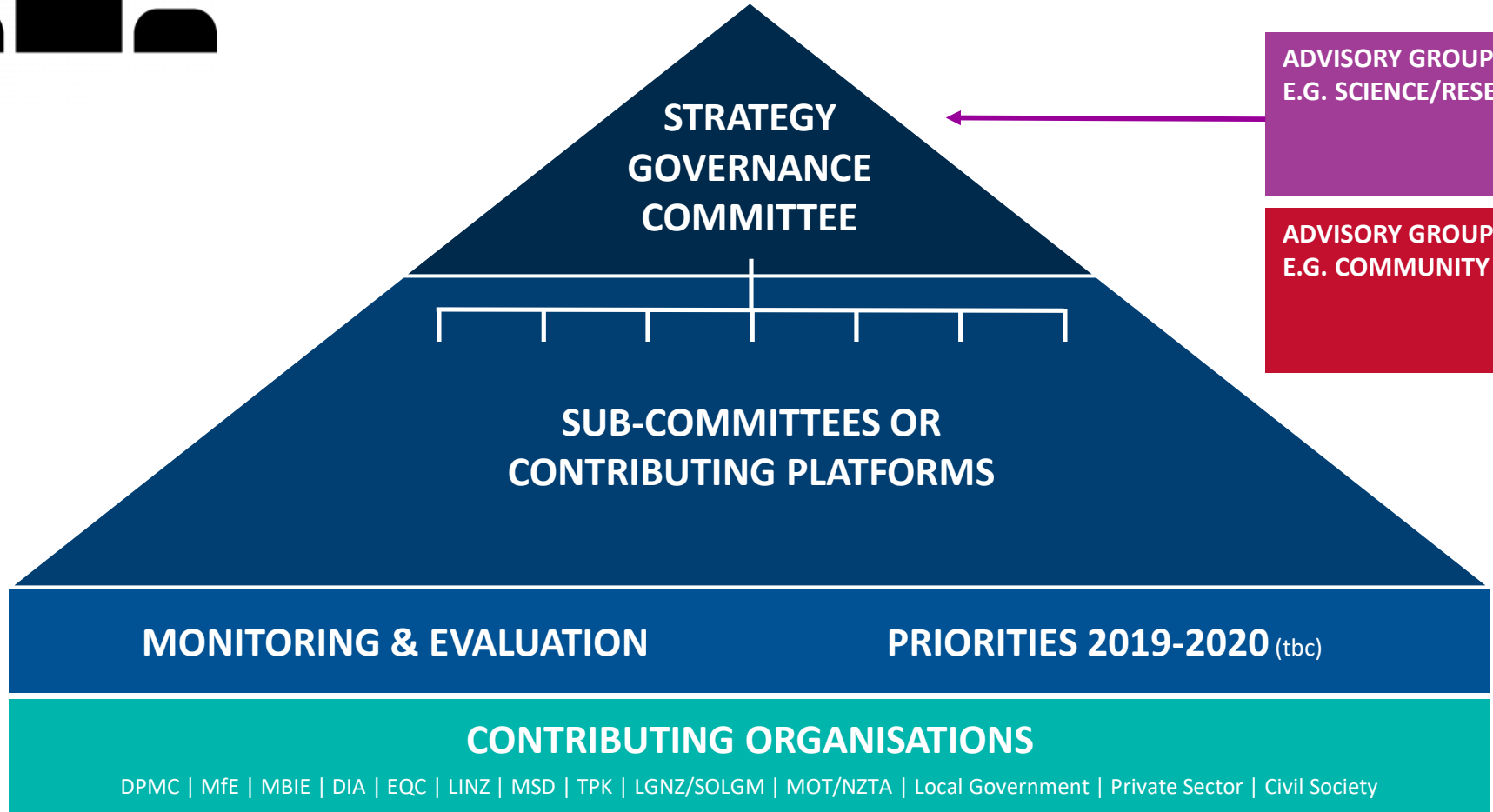


Governance





Governance



We all have a role in a disaster resilient nation

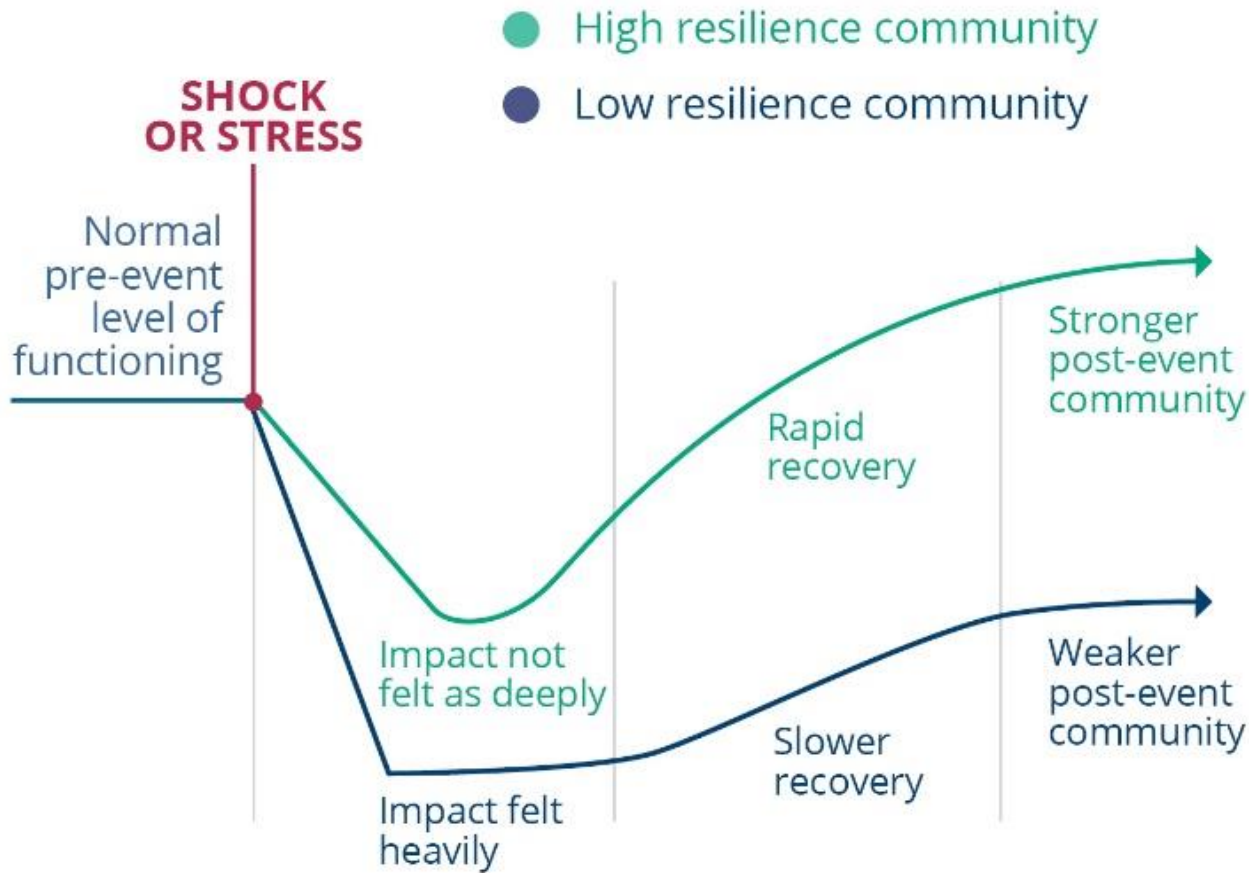
He wāhanga tō tātau katoa i roto i te iwi manawaroa aituā

Find out more at

www.civildefence.govt.nz



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1. DEPTH OF IMPACT
(ABSORPTION)

2. SPEED OF RECOVERY
(ADAPTABILITY)

DIMENSIONS OF RESILIENCE

