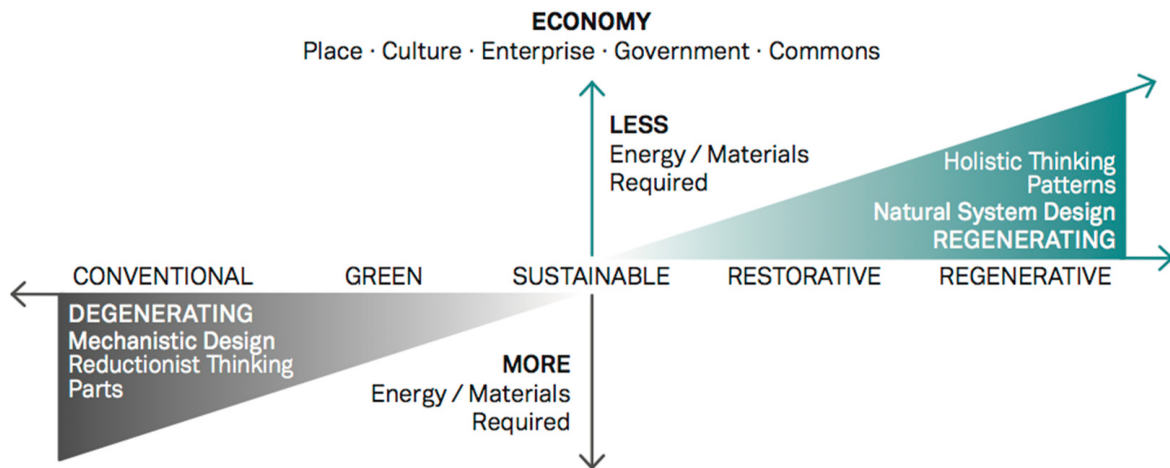# WHAT IS A 'REGENERATIVE' RECOVERY?

John Fullerton wrote that "Regenerative economics is the application of nature's laws and patterns of systemic health, self-renewal and regenerative vitality to socio-economic systems." The challenge is to move from a conventional economy through sustainability and on to a regenerative economy.

Fullerton, J. Regenerative Capitalism

When looking at our regenerative "field", we need to adopt an approach that will first get us to the "sustainable" tipping point before reaching the regenerative space. Below looks at the two approaches – the Sustainable Development Goals (SDG) and the Living Standards Framework (LSF) – and examines the synergies and gaps to see how these can form a comprehensive set of goals and measurable targets to move up and forward. The below is a quick summary of the matrix set up which examines these in more detail. Happy to share if anyone is interested.

Second, it's important to see how these goals, targets and indicators can be integrated into an easily understandable framework. The model used here is the Doughnut Economic Model by Kate Raworth. While this is by no means the only model, the Doughnut is probably one of the more understandable by the wider public and is being increasingly used both internationally and nationally by local governments as a path towards sustainability and regeneration.

After looking at both approaches, I have summarised this in a visual format to better illustrate how this could look for our divers regenerative field once we have looked at the soil and checked out the weather. The ecological ceiling is a set of tipping points articulated by the Stockholm Resilience Centre and integrated into the doughnut by Raworth and has been used here. They also crossover to a certain extent with the indicators in both the SDG and LSF but go beyond these. More information on the circular economy and how this functions within the doughnut can be found by looking at the work being done by the Ellen McArthur Foundation. Finally, I have used an indigenous interpretation of the Doughnut, which was formulated by Tiena Boasa-Dean.

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

What are they?

17 Goals and 230 Indicators (total number of indicators is 241, however nine indicators repeat under two or three different targets). Two rules guide these goals – firstly, all goals are interlinked and cannot be viewed in isolation from the others. Secondly, leave no one behind. The SDG were developed by UN member states in 2015 in reaction to climate change, massive migration, conflict and increasing inequalities. Its focus is to set global goals with defined indicators to end poverty, promote peace, share wealth, and protect the planet by 2030.

Strengths

- Internationally recognised and ratified goals. NZ is a signatory and submitted our first report to the UN last year.
- Uptake and integration of the SDG by business and educational institutions has been strong.
- Comprehensive set of indicators integrated with to internationally recognised scientific targets (climate, biodiversity loss, pollution etc.)

Gaps

Cultural identity – Only three goals and three related indicators mention indigenous peoples or cultural diversity.

Subjective Wellbeing – no set indicators.

Equality – Too narrow, applies only to gender equality.

Life below Water – relates only to saltwater not freshwater. Should be interpreted to apply to both.

Life on Land – Does not specifically address phosphorus loading/fertilizer use or ozone layer depletion.

NOTE: Two targets specifically relate to our work:

8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products

NZ LIVING STANDARDS FRAMEWORK

What are they?

The LSF provides indicators and analysis the Treasury uses to set wellbeing budgetary priorities. It is made up of three areas:

- *Our Country (OC)* – A set of 43 indicators categorised into 12 "Wellbeing Domains" (these are headers only and not goals).
- *Our Future (OF)* – Indicators for the "Four Capitals" – Natural, Social, Human and Financial & Physical.
- *Our People* – Analysis of the Our Country indicators to compare demographic groups and see relationship between indicators.

Strengths

The LSF set out a holistic wellbeing approach to budgetary planning. *Our Country* includes subjective indicators on cultural identity, subjective wellbeing and time use.

These are not found in any of the other frameworks mentioned and is a real approach to defined and measure wellbeing and set priorities to increase wellbeing as a nation.
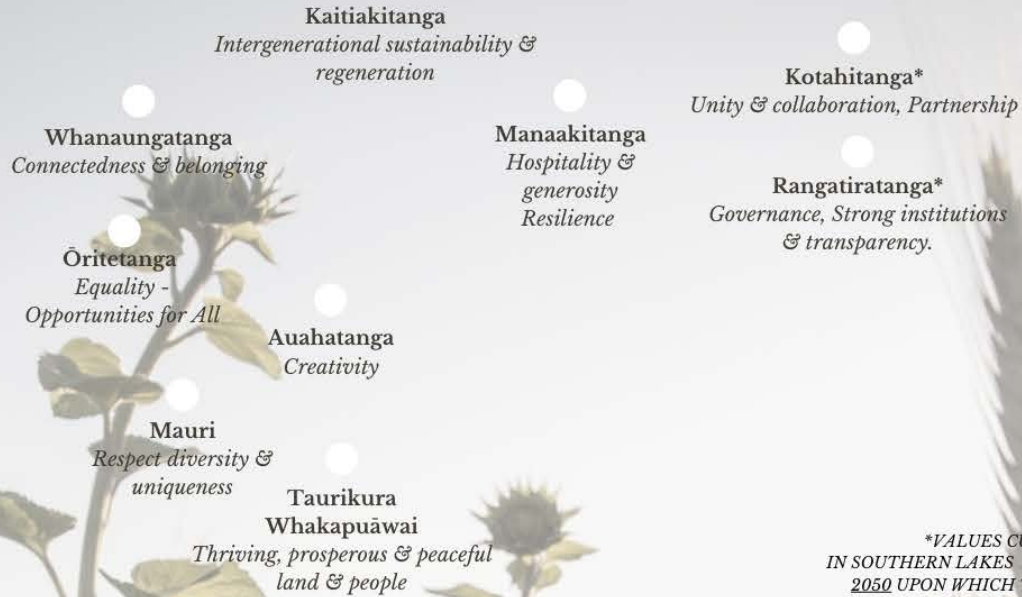
Gaps

The LSF only contain indicators, there are no targets set out or goals. They have been formulated to help guide budgetary decisions, not as a model for sustainable development. Specific gaps include:

- *Food Security* – One indicator on food production. Does not fully address food security or sustainable agricultural practices.
- *Health* – Does not address substance abuse, maternal care, communicable diseases, traffic accidents, access to health facilities.
- *Education* – does not address access to education, infrastructure spend on educational facilities and amenities, number of schools teaching education for sustainability development/global citizenship etc.
- *Gender Equality* – No specific indicators
- *Water* - Water indicators relate only to drinkability and swimability. No indicators for wastewater treatment and sanitation, sustainable use of water resources and water resource management plans.
- *Renewable Energy* – Could add percentage of GDP being invested in increasing energy efficiency.
- *Industry, innovation and infrastructure* – One indicator only on investment in R&D. Missing indicators on % of population with access to internet; Researchers (in full-time equivalent) per million inhabitants; Proportion of medium and high-tech industry value added in total value added; CO_2 emission per unit of value added…
- *Circular economy* – only indicator is kg waste per capita. Missing indicators on Material footprint, material footprint per capita, and material footprint per GDP; food waste; No. of companies publishing sustainability reports; Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools; Carbon footprint.
- *Environmental indicators* - not as comprehensive as the SDG and some are subjective indicators based on perception.
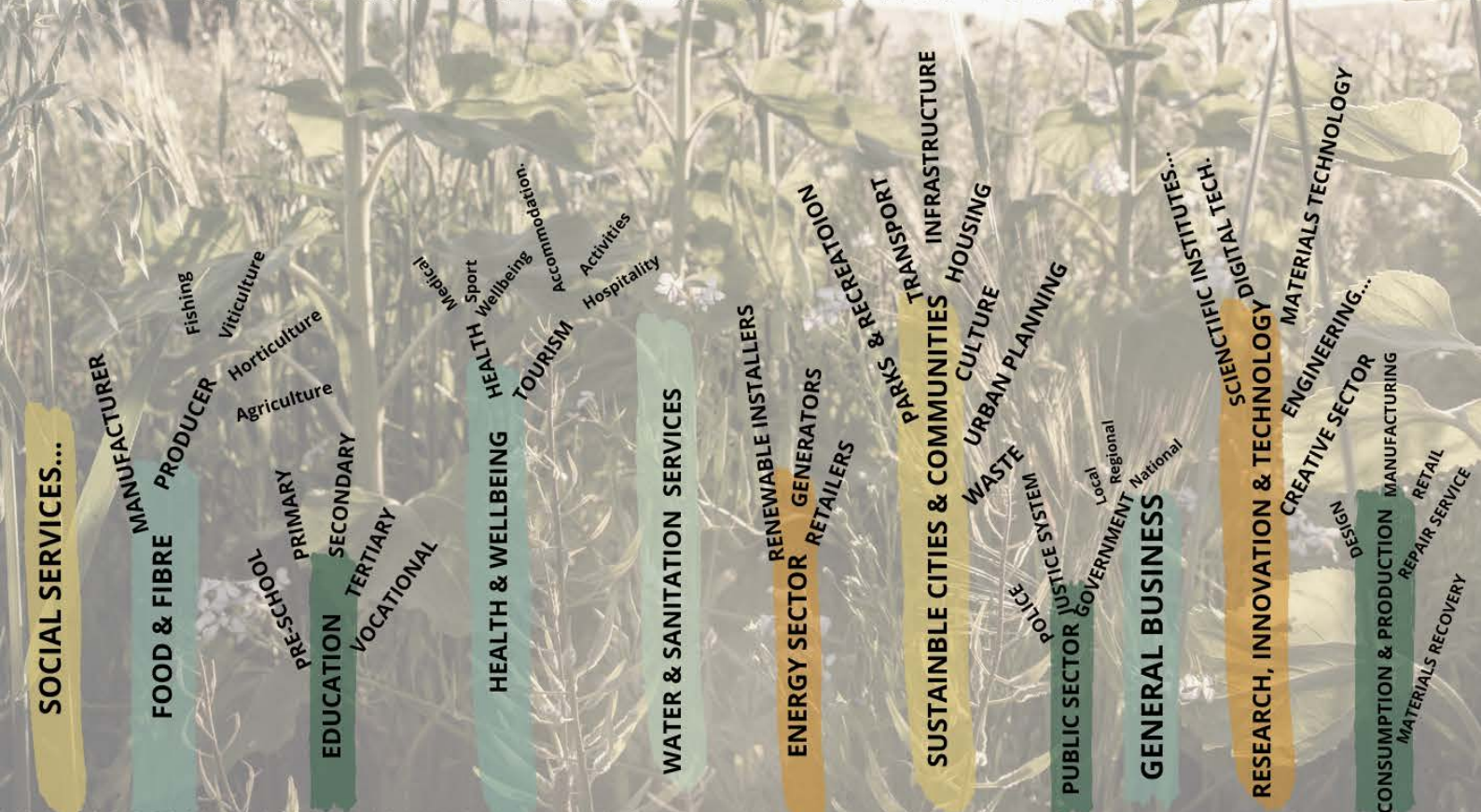- *Partnership* – no indicators.

Kaitiakitanga
Intergenerational sustainability & regeneration

Kotahitanga*
Unity & collaboration, Partnership

Whanaungatanga
Connectedness & belonging

Manaakitanga
Hospitality & generosity Resilience

Rangatiratanga*
Governance, Strong institutions & transparency.

Ōritetanga
Equality - Opportunities for All

Auahatanga
Creativity

Mauri
Respect diversity & uniqueness

Taurikura Whakapuāwai
Thriving, prosperous & peaceful land & people

*VALUES CURRENTLY NOT INCLUDED IN SOUTHERN LAKES DISTRICTS VISION BEYOND 2050 UPON WHICH THESE VALUES ARE BASED

HĀ TUAMĀTANGI - *OUR ECOLOGICAL CEILING*

Climate Change	Ozone layer depletion	Air pollution	Ocean Acidification	Freshwater withdrawal	Nitrogen & Phosphorous Loading	Waste & Pollution	Land Conversion	Biodiversity

RANGI - *SKY*   **WAI - *WATER***   **WHENUA - *LAND***

TE IHO NUI - THE SAFE & JUST SPACE FOR HUMANITY

SOCIAL SERVICES...

FOOD & FIBRE
MANUFACTURER
PRODUCER
Fishing
Viticulture
Horticulture
Agriculture

EDUCATION
PRE-SCHOOL
PRIMARY
SECONDARY
TERTIARY
VOCATIONAL

HEALTH & WELLBEING
Medical
Health
Sport
Wellbeing

TOURISM
Accommodation
Activities
Hospitality

WATER & SANITATION SERVICES

ENERGY SECTOR
RENEWABLE INSTALLERS
GENERATORS
RETAILERS

SUSTAINBLE CITIES & COMMUNITIES
INFRASTRUCTURE
TRANSPORT
HOUSING
PARKS & RECREATOION
CULTURE
URBAN PLANNING
WASTE

PUBLIC SECTOR
JUSTICE SYSTEM
POLICE
GOVERNMENT
Local
Regional
National

GENERAL BUSINESS

RESEARCH, INNOVATION & TECHNOLOGY
SCIENCTIFIC INSTITUTES...
DIGITAL TECH.
MATERIALS TECHNOLOGY
ENGINEERING...
CREATIVE SECTOR

CONSUMPTION & PRODUCTION
MANUFACTURING
DESIGN
RETAIL
REPAIR SERVICE
MATERIALS RECOVERY

REGENERATIVE, CIRCULAR & DISTIBUTIVE ECONOMY

HUMAN   **SOCIAL**   **ECONOMIC**

Income	Food	Health	Education	Equality	Cultural identity	Networks	Clean Water & Sanitation	Clean Energy	Reduced Inequalities	Sustainable communities	Voice	Decent Work	Innovation	Circular Economy	Partnership

TŪĀPAPA O TE ORA - *OUR SOCIAL FOUNDATION*

Based on UN SDG, Kate Raworth's Doughnut Economics, NZ Living Standards Framework and Tiena Boasa-Dean's, Ohanga Iho Nui - An indigenous view of Doughnut Economics

Photo Credit: Camilla Rutherford Photography