SUSTAINABLE PROCUREMENT IN THE BUILT ENVIRONMENT

THE POWER OF PURCHASING

ICIBE 2021 and ICCPM 2021 (27-29/09/2021)

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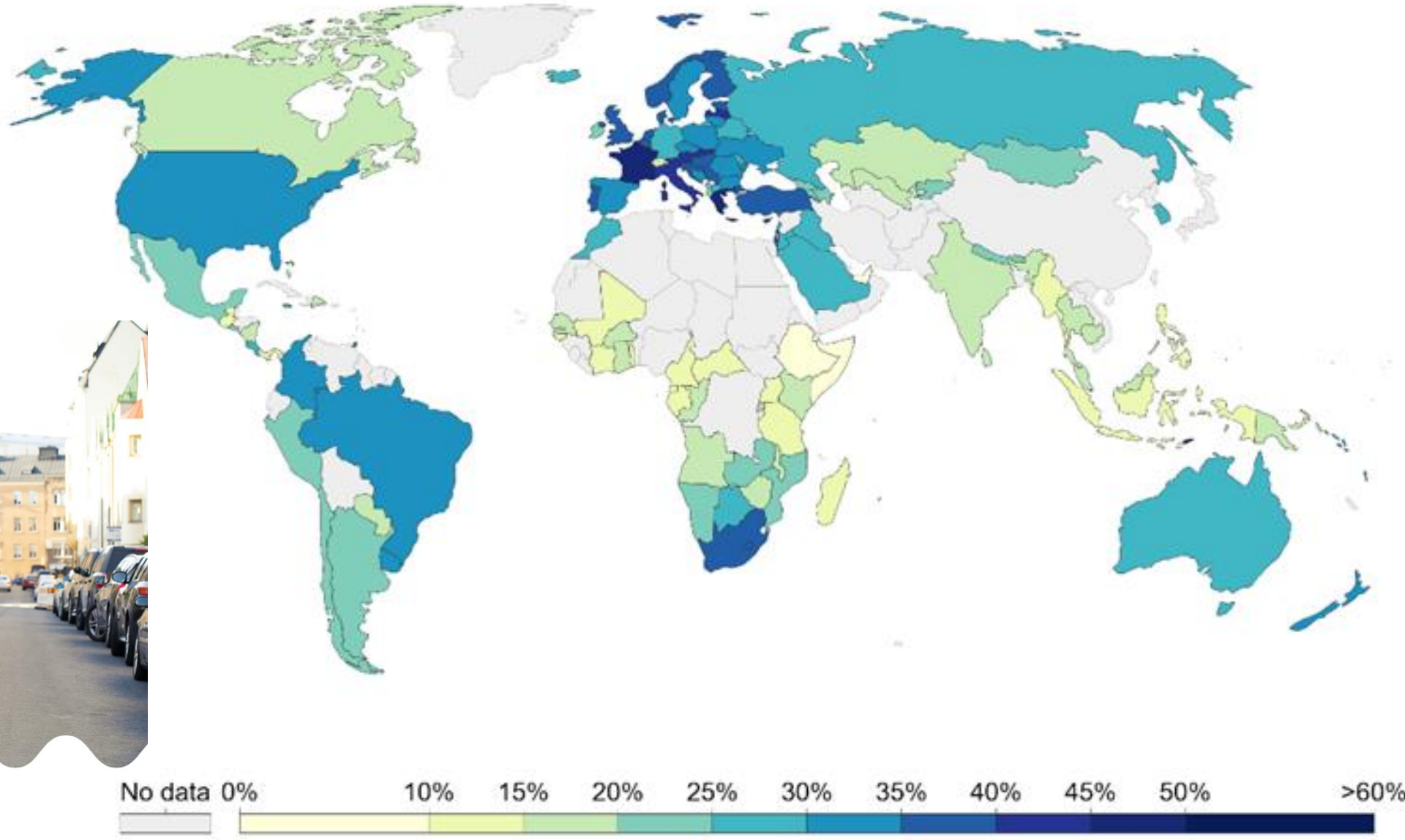
Public procurement spending across the world, as a share of GPD, 2020

- City of Helsinki
  - low-carbon IT equipment
  - Electricity: - 288,000€
  - CO2 emissions: -27,4%



Source: Our world in data 2021

Sustainable Procurement & 17 United Nations Sustainable Development Goals

Sustainable Procurement Indicators

1. Prevention of pollution
2. Sustainable resource use
3. Climate change mitigation and adaptation
4. Protection of the environment, biodiversity and restoration of natural habitats
5. Human rights and Labour issues
6. Inclusion of persons with disabilities
7. Gender issues
8. Social health and well-being
9. Whole life cycle cost
10. Local communities and SMEs
11. Promoting sustainability throughout the supply chain
12. Generic additional indicators

Source: https://www.ungm.org

UNITED NATIONS GLOBAL MARKETPLACE

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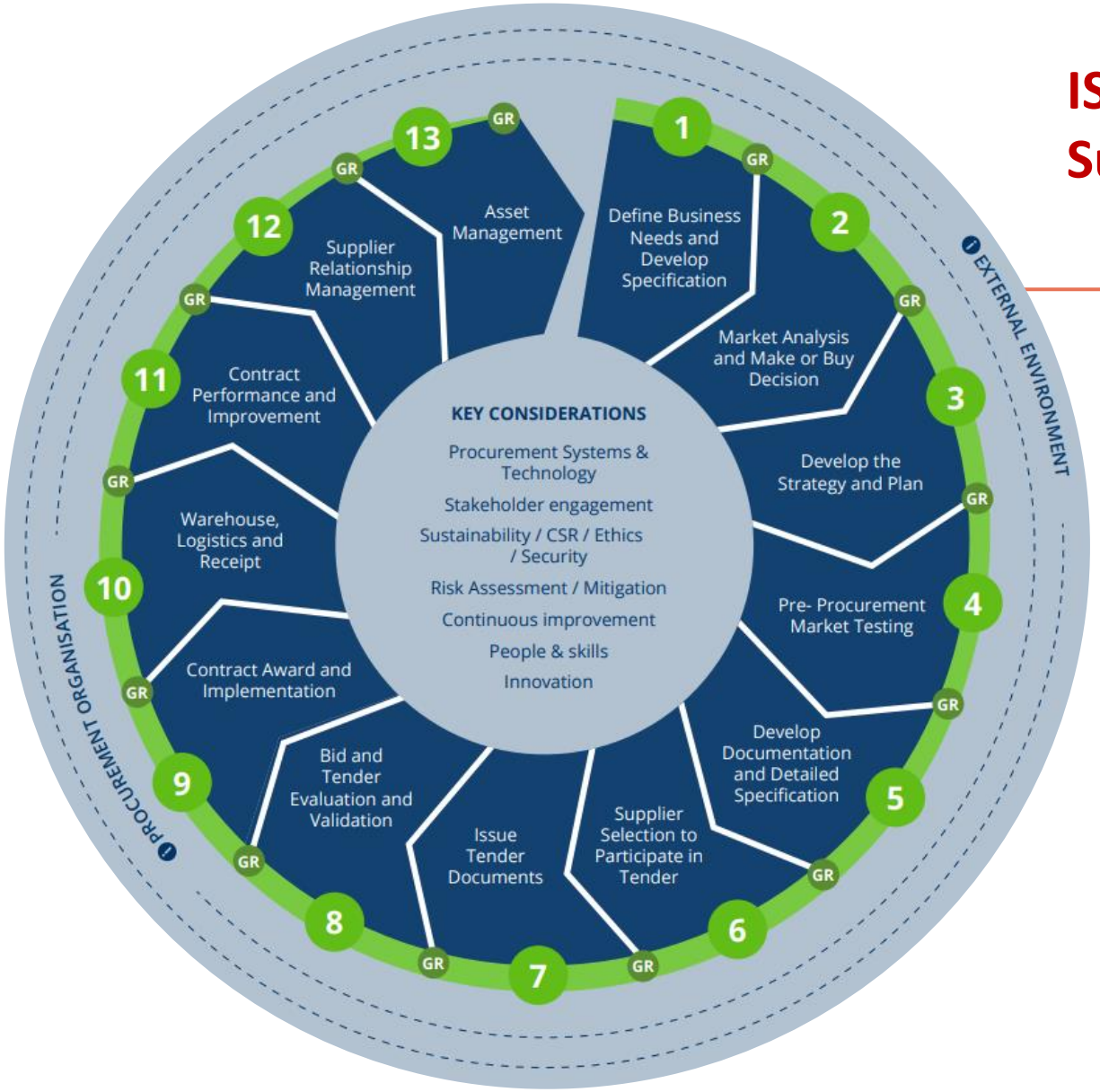
ISO 20400:2017
Sustainable Procurement Guidance Standard



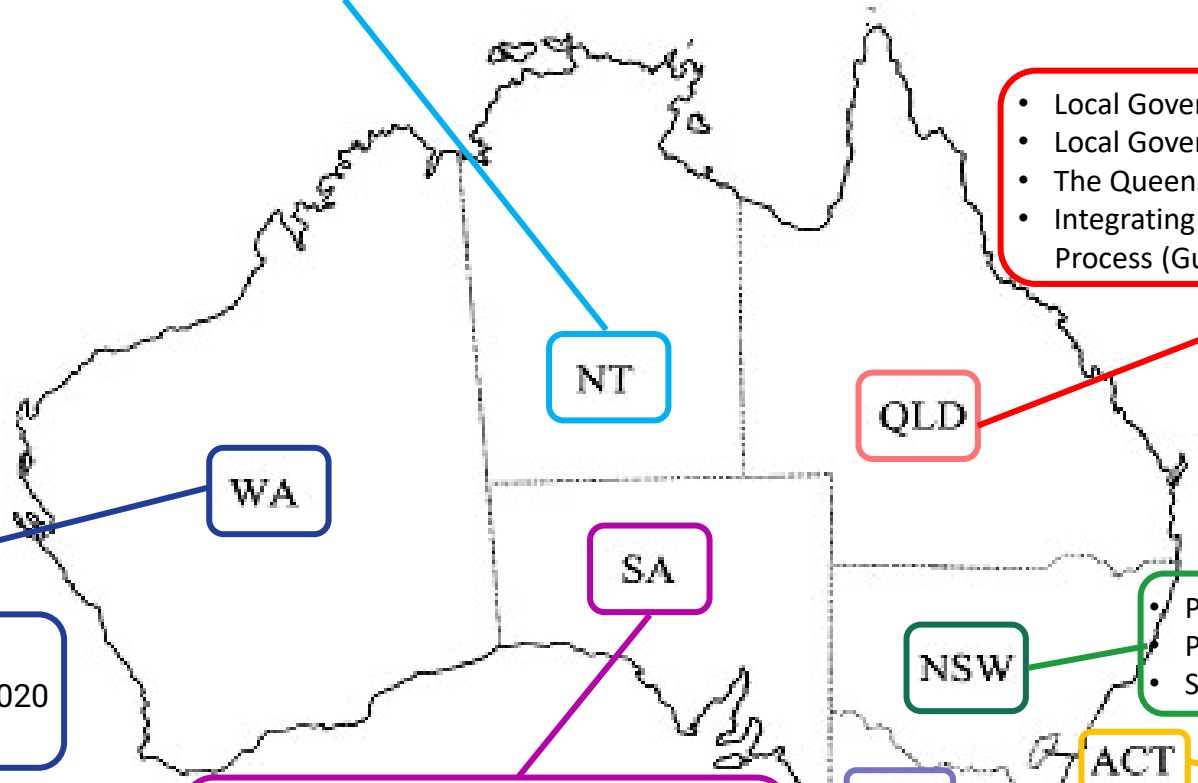
➢ Principles of Sustainable Procurement

- **Accountability** of procurement impacts
- **Transparency** of the supply chain
- **Ethical** behavior throughout the supply chain
- **Full** and **fair** opportunity for SMEs businesses
- **Respect** for stakeholder interests
- **Respect** for the rule of law and international norms of behavior
- **Respect** for human and labor rights
- **Innovative** solutions to address sustainability objectives
- **Focus** on needs - buy only what is needed
- **Integration** of sustainability practices to maximize sustainable outcomes
- **life cycle costs** & **benefits** for society; environment; economy **(value for money)**
- **Continual improvement** of sustainability practices and outcomes

Legislative Framework on Procurement

in Australian States & Territories

- Procurement Act 1995
- Procurement Governance Policy 2019
- (PRINCIPLE 4: capability, capacity and sustainability of the industry)
- Procurement Rules 2019



- Local Government Act 2009
- Local Government Regulation 2012
- The Queensland Procurement Policy 2021
- Integrating Sustainability into the Procurement Process (Guide) 2018

- Procurement Act 2020
- The WA Social Procurement Framework 2020
- Sustainable Procurement Guideline 2020

- Procurement Amendment Act 2018
- Procurement Policy Framework 2021
- Sustainable Procurement Guide 2017

ACT

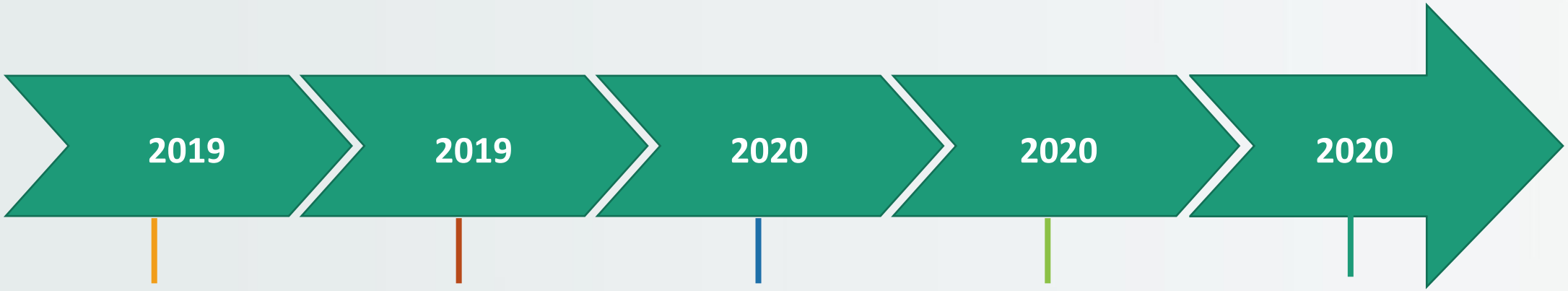
- Government Procurement Act 2001
- Government Procurement Regulation 2007
- Government Procurement Direction 2020
- Sustainable Procurement Policy 2015

- State Procurement Act 2004
- State Procurement Regulations 2020
- Procurement Governance Policy 2021
- Sustainable Procurement Guideline 2017

- The Financial Management Act 1994
- The Project Development and Construction Management Act 1994
- Local Government Act 2020
- Victoria's Government Procurement Policy 2020
- Victoria's Social Procurement Framework 2018 (Ch 3)

- The Local Government Act 1993
- Local Government (General) Regulations 2015
- Procurement Better Practice Guidelines 2021

Project Development Process



National Industry Research Workshops

Consolidate industry needs and challenges

SBEnrc Board's approval

Project centred around 'Sustainable Procurement'

Project Development Workshop #1

Discuss the challenges and needs around the theme of sustainable procurement

Working group develops the draft scope of project

Project Development Workshop #2

Feedback and discussions on draft project scope

Develop draft Project Schedule

Project Development Workshop #3

Confirm Project Schedule

Project Steering Group

Lack of information and assessment regimes of sustainability
Advice to clients on sustainable procurement
---- Will Hackney

Need to see greater consideration of Whole of Life Costings in driving better sustainable procurement outcomes
---- Lionel Pero

How do you see through your supply chain to understand how you might have an impact?
---- Louis Bettini

Better delivery on what gov. is asking for in terms of environmental sustainability
---- Ashley Newcomb

Setting specific targets to assess sustainability
---- Fiona Hogg

How to be sustainable re local resources?
How we can provide guidance on modern slavery and how we can leverage on current environment post COVID-19?
---- Alisha Larkin

How our provider treat the waste management (where they go) and contamination
---- Marissa Saunders

Upfront clear guidance on sustainability in procurement in projects.
What is the cost?
Clear guidance needed from clients
---- Amy Elkington

Social outcomes are not always addressed.
How to use the projects to achieve social outcomes
---- Karen Greaves

Transparency and tools; Consistency and simplification across various levels of gov. and private sector
---- Carl Barrett

Strongly suggest ISO 20400 Sustainable Procurement Guidance standard is referenced in this research in terms of a 'definition' and best practice process and implementation
---- Michael Whitehead

A guideline or tool box for sustainable procurement to define best practice and offer tools (data capture or analysis etc) or cases studies to assist in implementing the processes recommended.

----- Louis Bettini

Post COVID19 impacts for achieving sustainable procurement and how these impacts may be ameliorated.

Effective contract management and supply chain monitoring processes.

Consider industry rating tools.

----- Michael Whitehead

I'd like to see this project simplify sustainable procurement – KISS principle.

Extends beyond basic human rights into broader social advancement.

Consistency and simplification in processes

---- Carl Barrett

Need for sustainability incentives by client organisations.

Need for procurement commercial decision making.

Important to examine the role of stakeholders in transforming practices.

---- Lionel Pero

Link the targets to existing organisational procurement policies, tender evaluation, supplier/contractor selection.

Whether assessment of value is only limited to meeting organisational targets.

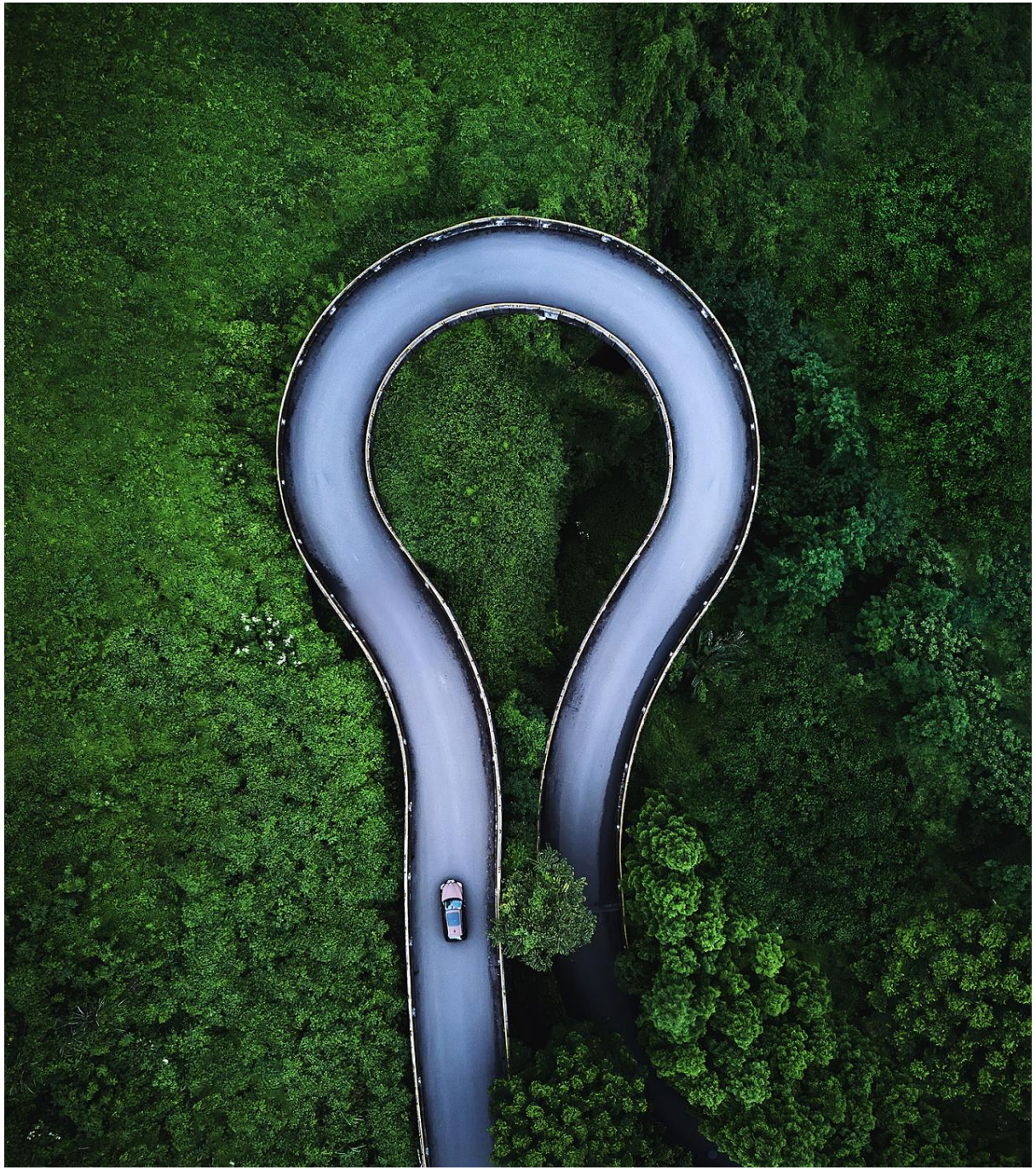
---- Sherif Mohamed

Industry Challenges

- Vast investment in housing, building and infrastructure
- Environmental and social impact
- Supply chain collaboration and engagement
- Justify procurement decisions
- Changing practices

Industry Needs

- What actually constitutes sustainability in terms of the procurement application?
- What is expected from procurement for sustainability?
- How to identify the products or services that genuinely support sustainable procurement goals, achieve the targeted outcomes and concurrently represent value-for-money in achieving those goals.



Industry Needs

- Social sustainability
- Local industry sustainability issues
- Whole-of-life waste management and circular economy
- better mechanisms that encourage recycled or sustainable products.
- Opportunity for growing social enterprises
- Sustainable issues across the procurement life cycle (i.e., planning, sourcing, and contract management)

Industry Needs

- verify the sustainability claims made by suppliers of products or services
- set specific targets to assess the sustainability components and performance of suppliers
- data on the size and value of the opportunity in addressing sustainable procurement.
- procurement commercial decision making to consider whole of life benefit and reduced environmental and social impact.

Industry Needs

- monitor suppliers practices, evaluate their sustainability performance, and identify the risks
- tracking imports to achieve social sustainability outcomes and improving visibility on the sustainability of imported products
- sustainable procurement in a post COVID19 setting

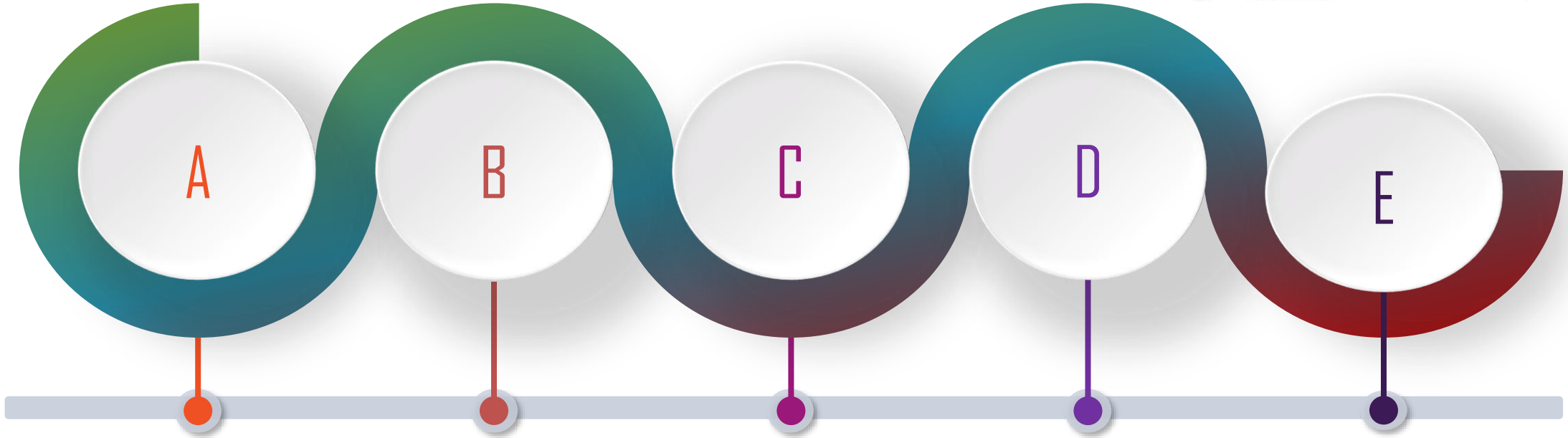
Industry Needs

- Consistency and simplification across various levels of government and private sector
- clear guidelines, framework, processes and tool boxes for sustainable procurement
- Business as Usual
- sustainability incentives by client
- respond to changing practices including digitisation

This industry-driven research project will respond to identified industry challenges by examining key issues across system, organisation and procurement process and focusing on finding practical ways to improve environmental, social, and economic sustainability outcomes in the housing, building and infrastructure sectors in Australia

Research Aim

Research Strategy



Research Design

- Articulate well-defined research questions
- Consult with existing literature
- Initially Consult with industry experts

Data Collection

- Develop Focus Group Discussion protocol
- Recruit participants
- Conduct Focus Group Discussions
- Give extraordinary voice to informants
- Adjust protocol based on informant responses

Data Analysis

- Perform initial data coding
- Develop a comprehensive compendium of 1st order concepts (participant-driven)
- Organise 1st order codes into 2nd order themes (theory-driven)
- Distil 2nd order themes into overarching theoretical dimensions

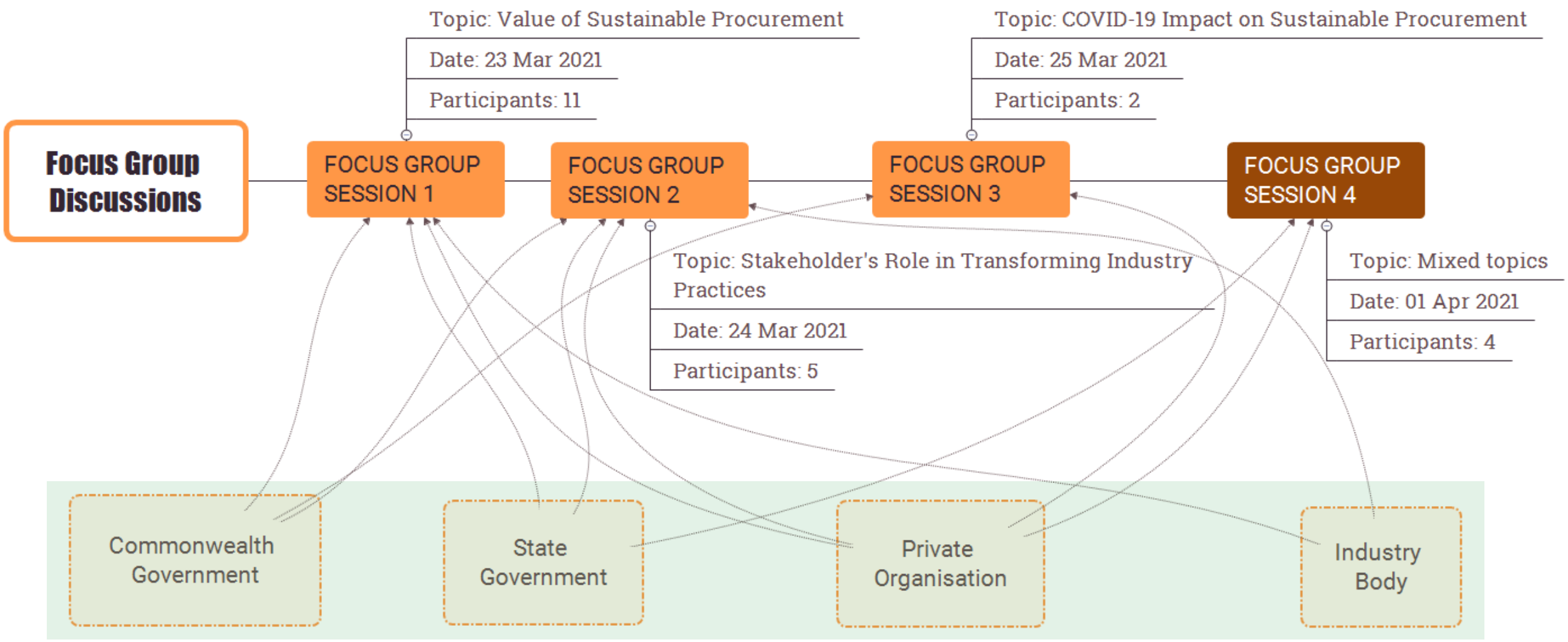
Development of Framework

- Formulate dynamic relationships among the 2nd order concepts
- Conduct additional consultations with the literature to refine the concepts and relationships
- Transform concepts and relationships into framework

Case Studies

- Test and refine the framework
- Develop Guide
- Develop Tools

Focus Group Discussions - Overview



Value and impact

Environment

Maximising the use of locally available recycled materials

Reserving natural resources through reuse and recycling

Reduding water consumption, energy use and land use

Reducing waste generation and waste packaging

Reducing CO_2 emissions by diverting materials from landfills

Promoting environmentally sustainable solutions

Enhancing environmental protection and improving public health

Establishing high environmental performance standards for products and services

Social

Improving brand value and reputation of the organisation

Meeting corporate social responsibility (CSR)

Increasing local community's confidence and trust

Supporting disadvantaged, marginalised and minority groups

Raising awareness for sustainaility issues

Improving working conditions, labour standards, health and safety

Growing local businesses and enhancing local economy resilience

Providing job, education and training opportunities for local communities

Promoting social justice and improving the quality of life

Economic

Increasing the speed of revenue growth

Maximising the return of investment

Acquiring competitive advantage

Increasing sales with ethical consumers

Reducing exposure to financial risks

Stimulating competition, thus reducing prices for environmental technologies

Gaining market share and delivering better service

Life Cycle Cost Savings

Governance

Ensuring transparency during the tendering

Reducing exposure to ethical risks

Complying with the legislation and other regulations (i.e., Modern Slavery Act)

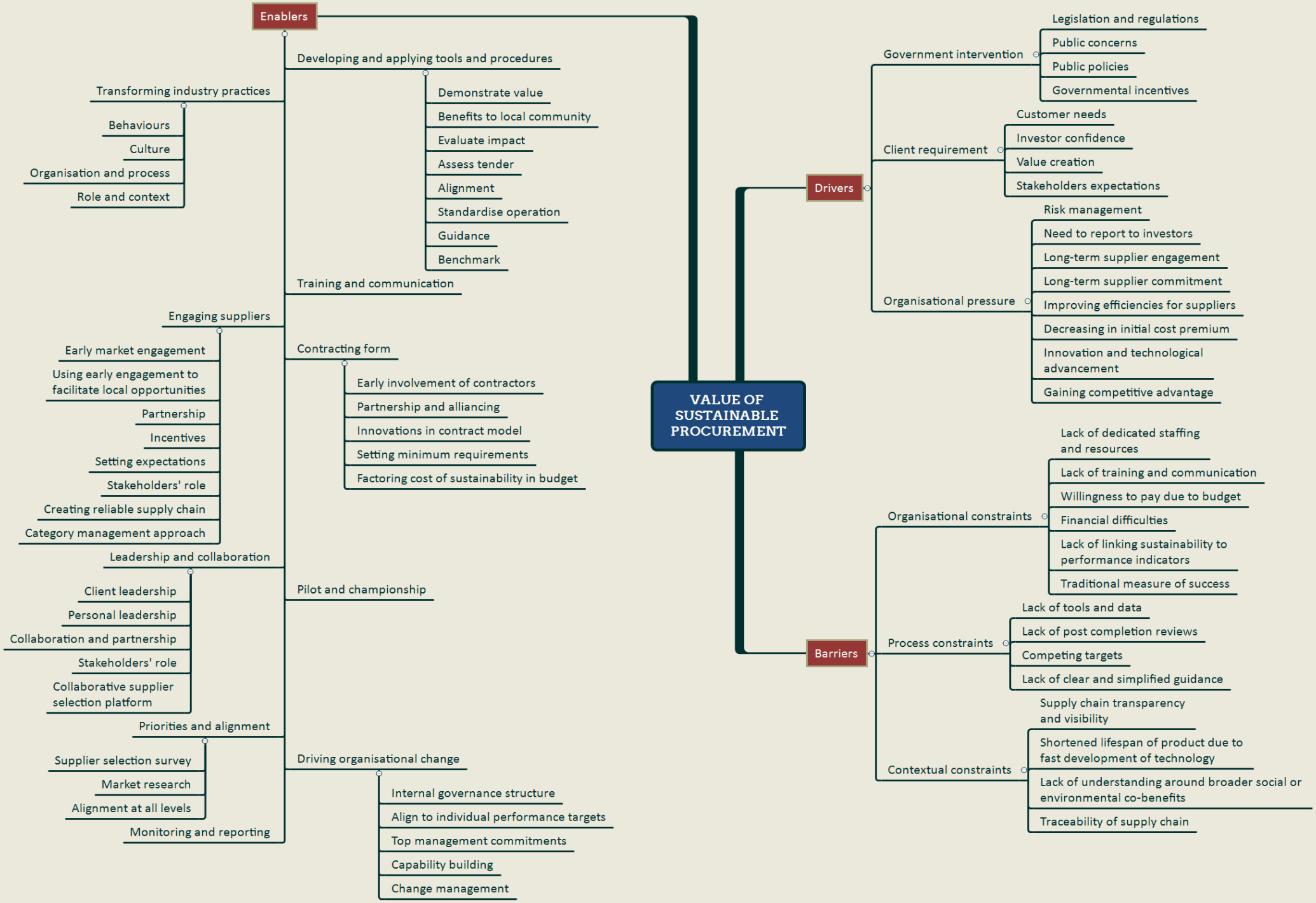
Avoiding supply chain's disruptions

Anticipating legal obligations

Setting an example to private consumers and to the industry (Champion)

Building organisational capability

Changing organisational culture



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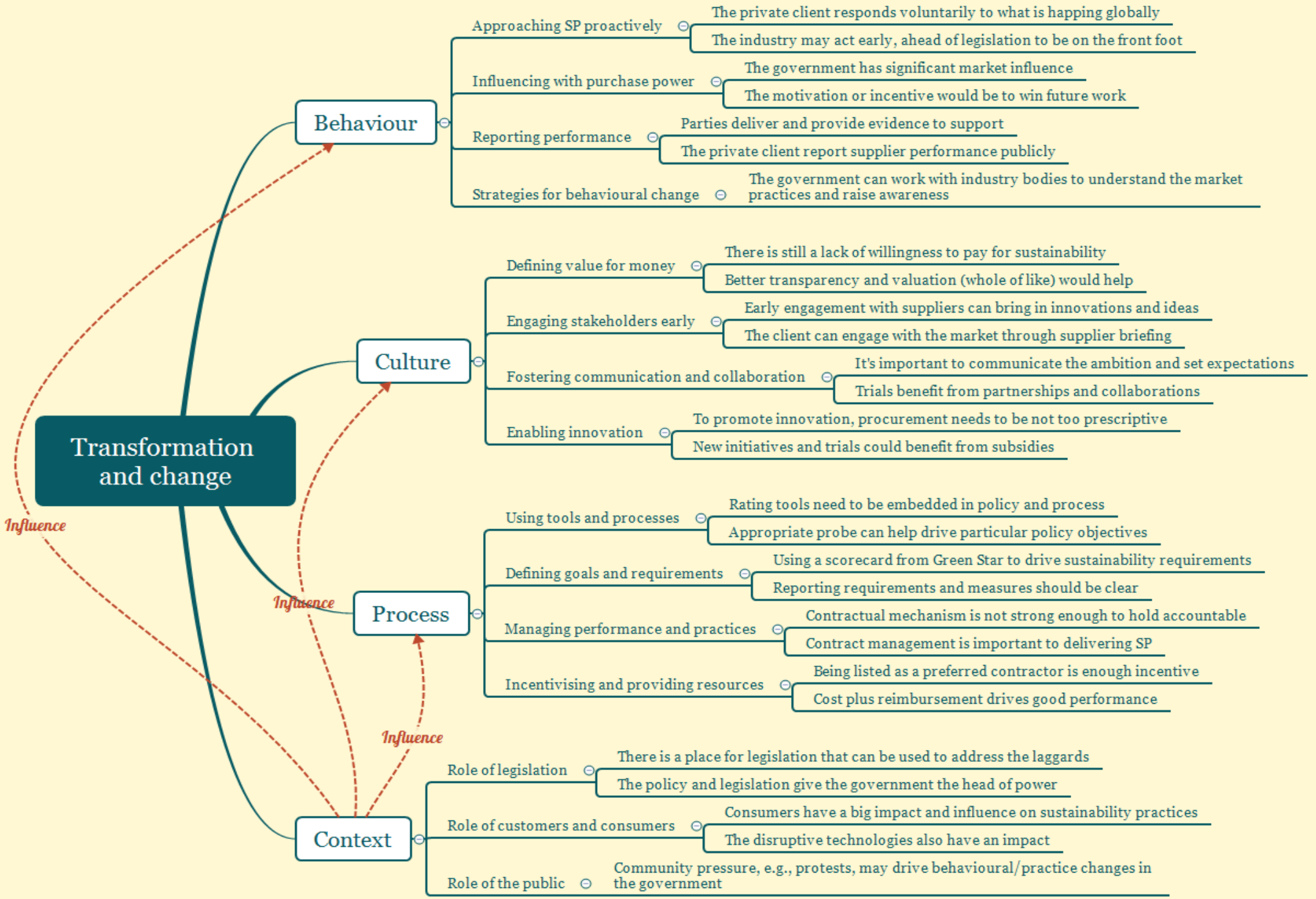
77 First order themes (participants-driven)

16 Second order themes (researcher-driven)

3 Aggregated categories



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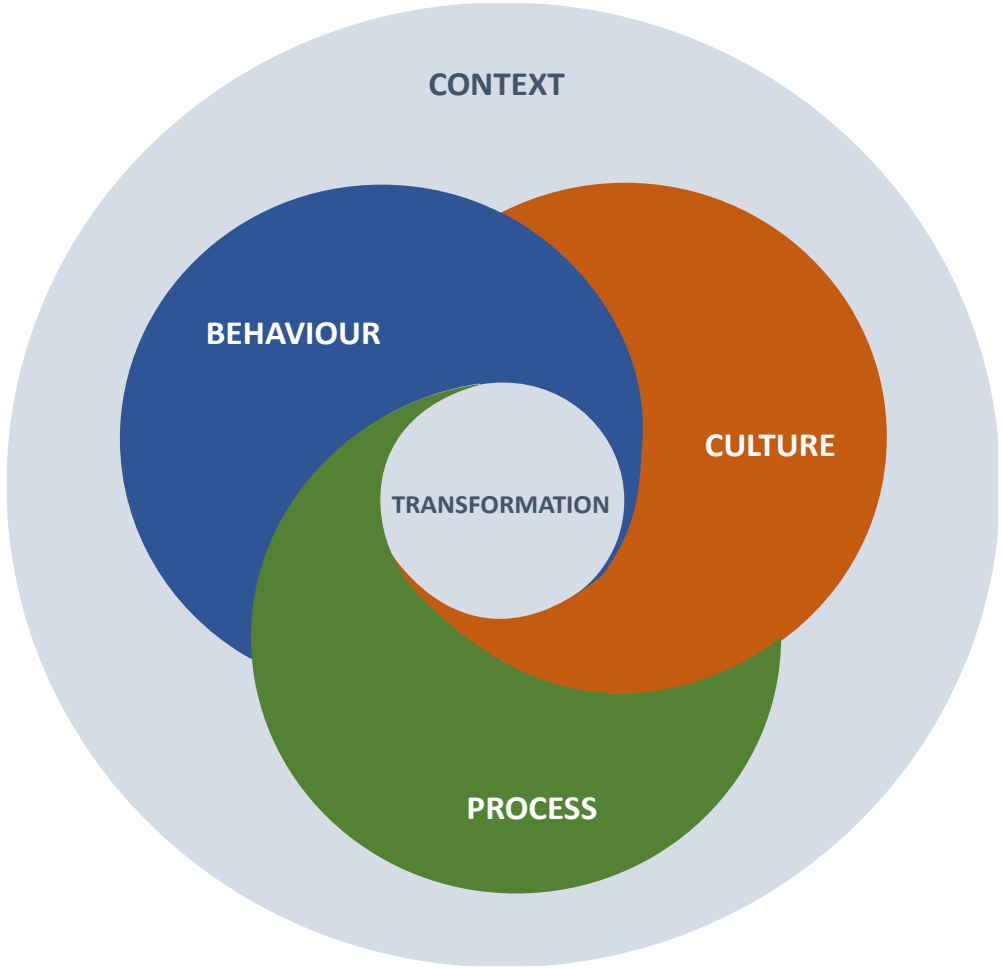
136 First order themes (participants-driven)

15 Second order themes (researcher-driven)

4 Aggregated categories

Industry Practice Transformation



ENABLE

- Commit leadership
- Clarify ownership
- Set clear policy priorities
- Develop capabilities
- Ensure budget
- Provide resources

ENCOURAGE

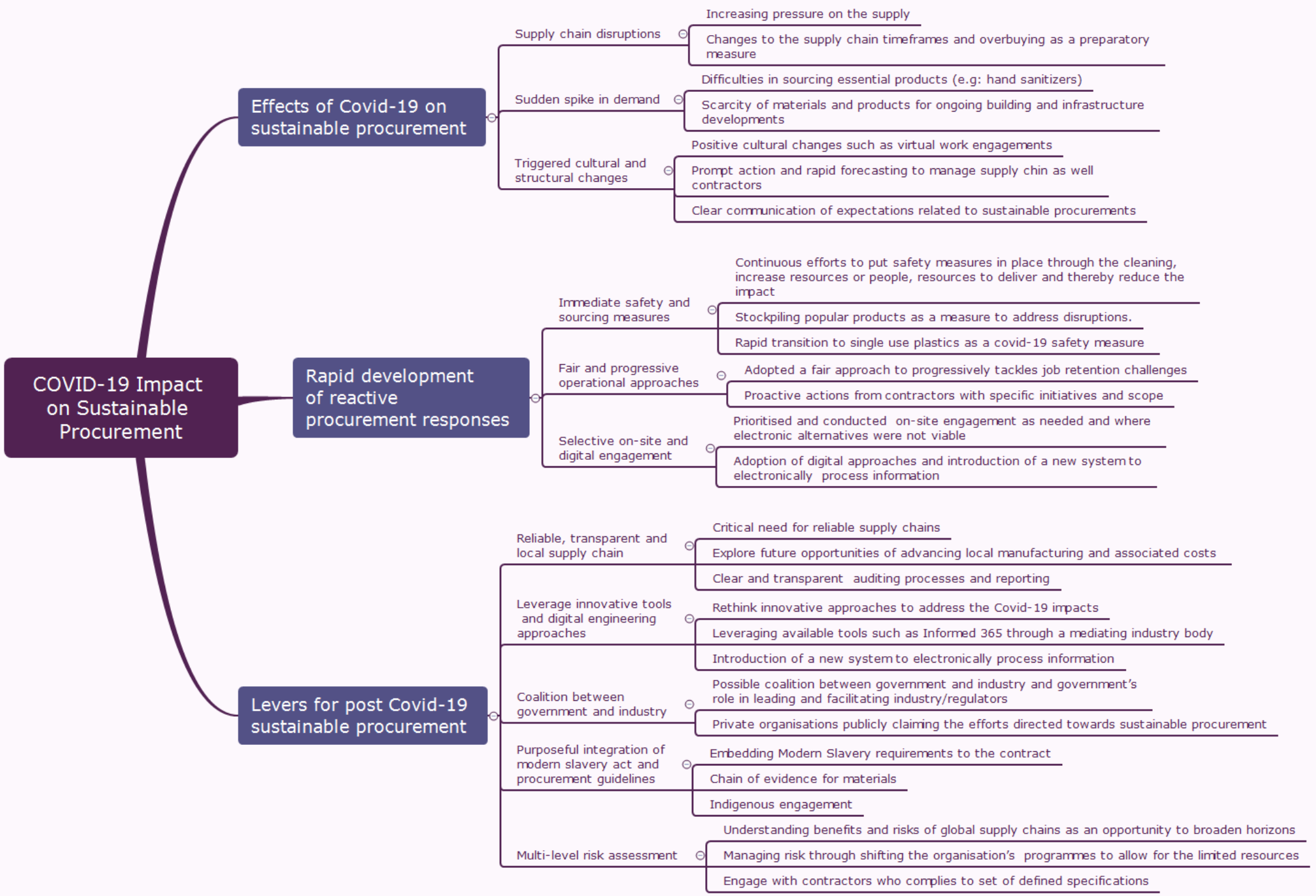
- Use incentive systems
- Create internal rewards
- Recognise good practice

ENGAGE

- Engage organization
- Support innovation
- Integrate sustainability into procurement
- Build long-term supplier relations

ENFORCE

- Monitor performance
- Sanctions for not meeting standards and targets



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83 First order themes (participants-driven)

11 Second order themes (researcher-driven)

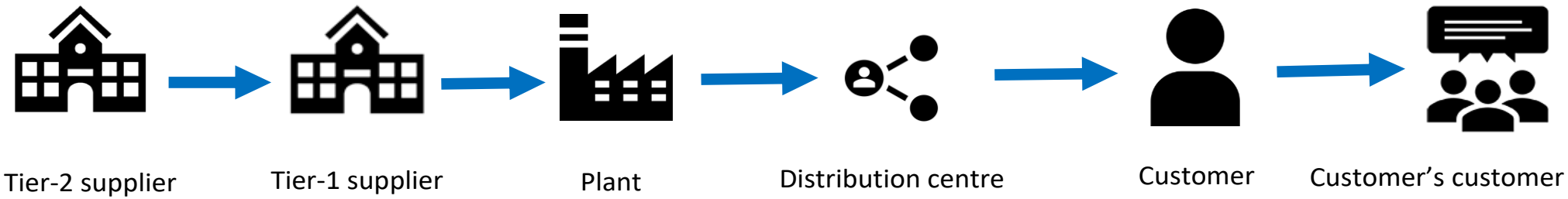
3 Aggregated categories

Actions in response to COVID-19

1. **Create transparency on multitier supply chain**
- Determine the critical components and the origin of supply
- Look at alternative sources if suppliers are in severely affected regions

2. **Optimise production and distribution capacity**
- Assess impact on operations and available resource capacity
- Conduct scenario planning, schedule assessment, time impact analysis

3. **Assess realistic final-customer demands**
- Leverage direct-to-consumer channels of communication
- Use market insights/external databases to estimate for customer's customers

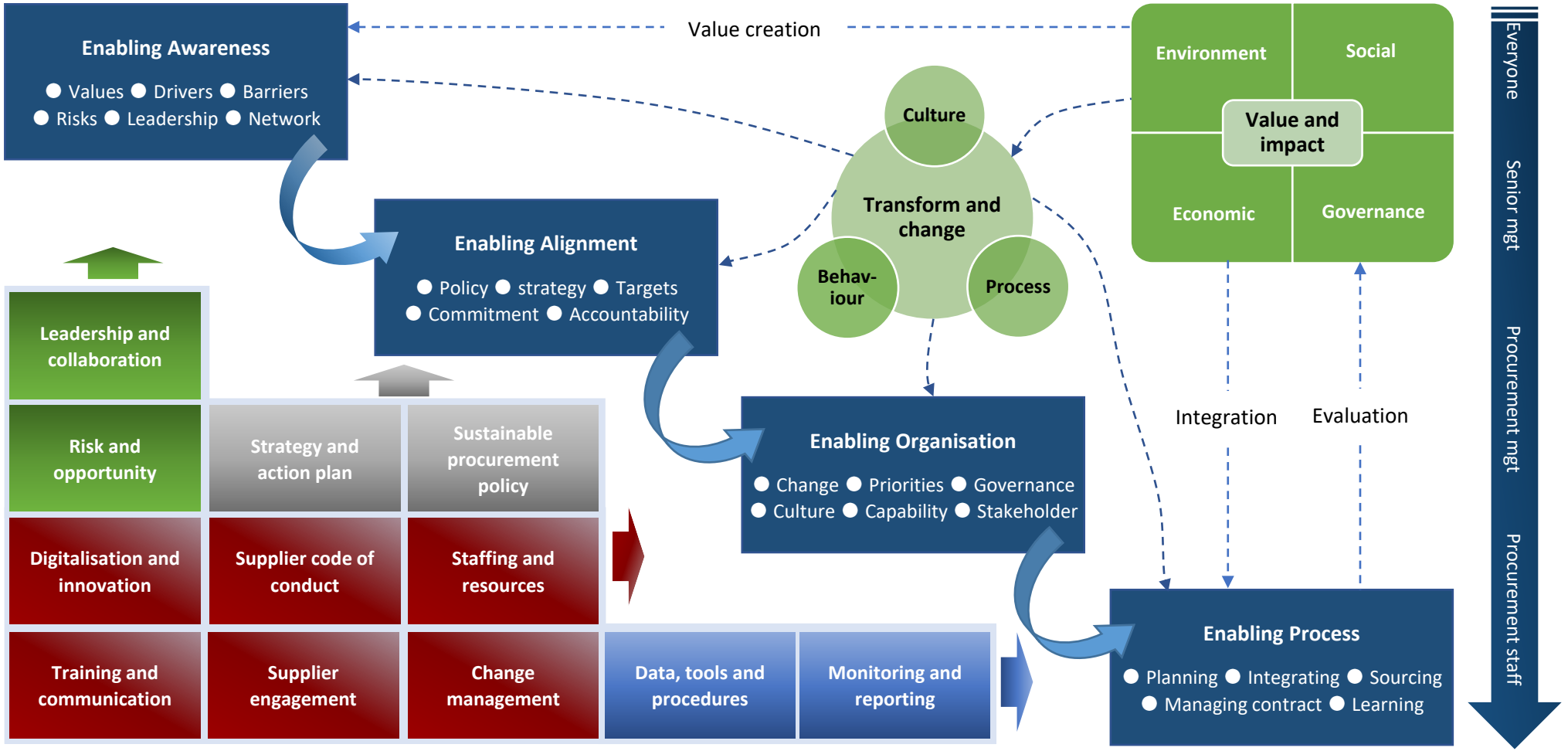


4. **Leverage technologies to support goals**
- Utilising digital tools to audit supply chains, to tracking emission footprints through energy management suites
- 3D design models (e.g. BIM) helps to visualise the project within team meetings in order to comply with the COVID-19

5. **Utilise multi-level risk assessment**
- Assess interruption risk and identify likely tier-2 onward risks
- Use specific tailored risk-mapping approaches such as country-level/business/factory level risk assessment, crisis protocol and grievance mechanism

6. **Ensure the processes are aligned with existing initiatives**
- Development Goals
- ISO-20400

Framework for enabling sustainable procurement



Guide and Tools

GUIDE TO ENABLING SUSTAINABLE PROCUREMENT

DESCRIPTION OF FRAMEWORK, COMPONENTS, KEY CONSIDERATIONS AND ACTIONS

Informed by focus groups and literature

BEST PRACTICES MAPPING TOOL

Informed by focus groups and literature

STAKEHOLDERS' INTERESTS AND INFLUENCE MAPPING TOOL AND MATRIX

Informed by focus groups and literature

AUSTRALIAN CASE STUDIES

Informed by Case Studies

Case studies

- Green concrete
- Recycled contents
- Modern slavery
- Regional participants
- Marginalised groups

Case Study 1: Green Concrete

- ✓ Reduce water consumption
- ✓ Save energy
- ✓ Minimise waste
- ✓ Support Circular Economy
- ✓ Avoid landfilling of GGBF slag
- ✓ Mitigate CO_2 emissions
- ✓ Preserve natural resources (aggregates)
- ✓ Accurate mixing with separate silos

Recycled aggregate and reclaimed or recycled water

Dedicated silos with granulated blast-furnace slag

Use of CRC in a roadwork during mixture and compaction (left) and after trimming and sweeping (right)

- ✓ Avoid landfilling of C&D waste
- ✓ Reduce the burden in landfills
- ✓ Support Circular Economy
- ✓ Mitigate life cycle CO_2 emissions
- ✓ Preserve natural resources (aggregates)

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Case Study 2: Recycled Content

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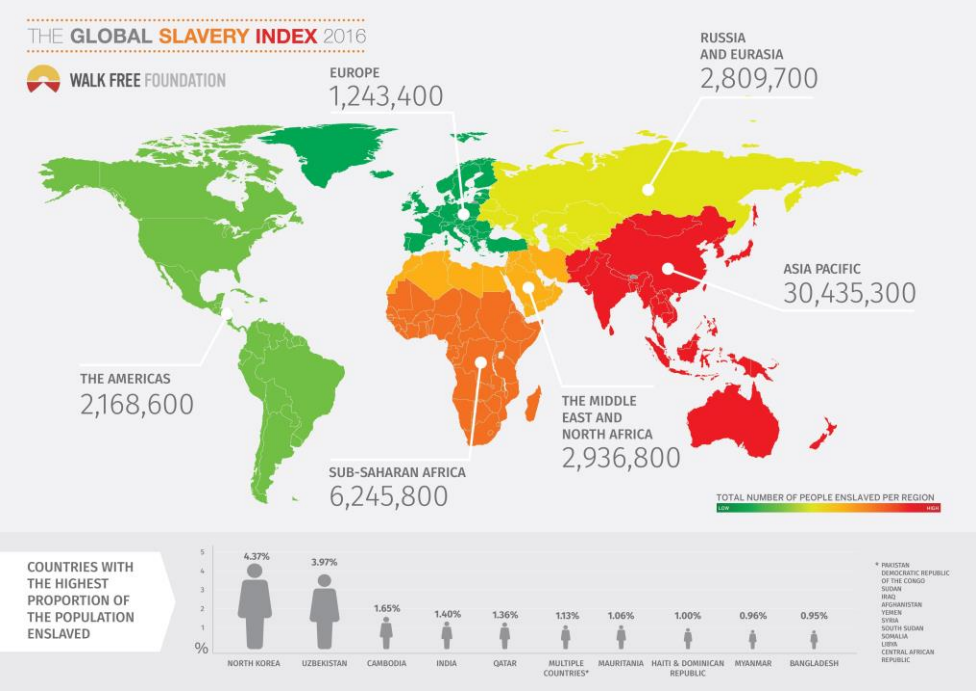
Case Study 3: Modern Slavery Act



Stockland

Willowdale Retirement Village - Stage 8 Project

Material	Brickwork	Tiles	Joinery	Carpet	Soffit Lining and Cladding	Skirting	Window architrave
Supplier / Tier / Outcome	Brick Manufacturer (Tier: 2) Engagement Ongoing	Tiling Subcontractor (Tier: 2) Satisfactory Response	Joinery Subcontractor (Tier: 2) Satisfactory Response	Carpet Manufacturer (Tier: 3) Engagement Ongoing	Cladding Manufacturer (Tier: 3) Engagement Ongoing	Skirting Manufacturer (Tier: 3) Satisfactory Response	Architrave Supplier (Tier: 2) Satisfactory Response
		Tile Manufacturer (Tier: 5) Satisfactory Response	Stone Manufacturer (Tier: 3) Engagement Ongoing				Architrave Manufacturer (Tier: 3) Satisfactory Response

Case Study 4:
People with marginalised background

Queensland Government

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- 14 full-time employees with **diverse cultural** and **linguistic background** in Toowoomba (Social Partner: Ability Enterprises)
- 21 **young** people long-term unemployed (Social Partner: YourTown Enterprises)
- Graphic design training and job opportunities for **prisoners** at the Borallon Training and Correctional Centre (Social Partner: Fox Studio)
- Support **refugees** in South QLD by creating videos in 35 languages about the COVID-19 pandemic (Social Partner: Access Community Services)
- Secure job vacancies for 350 people with **disabilities** by developing an innovative online ordering system for 'TransLink' (Social Partner: HELP Enterprises)

Case Study 5:
Regional Participants

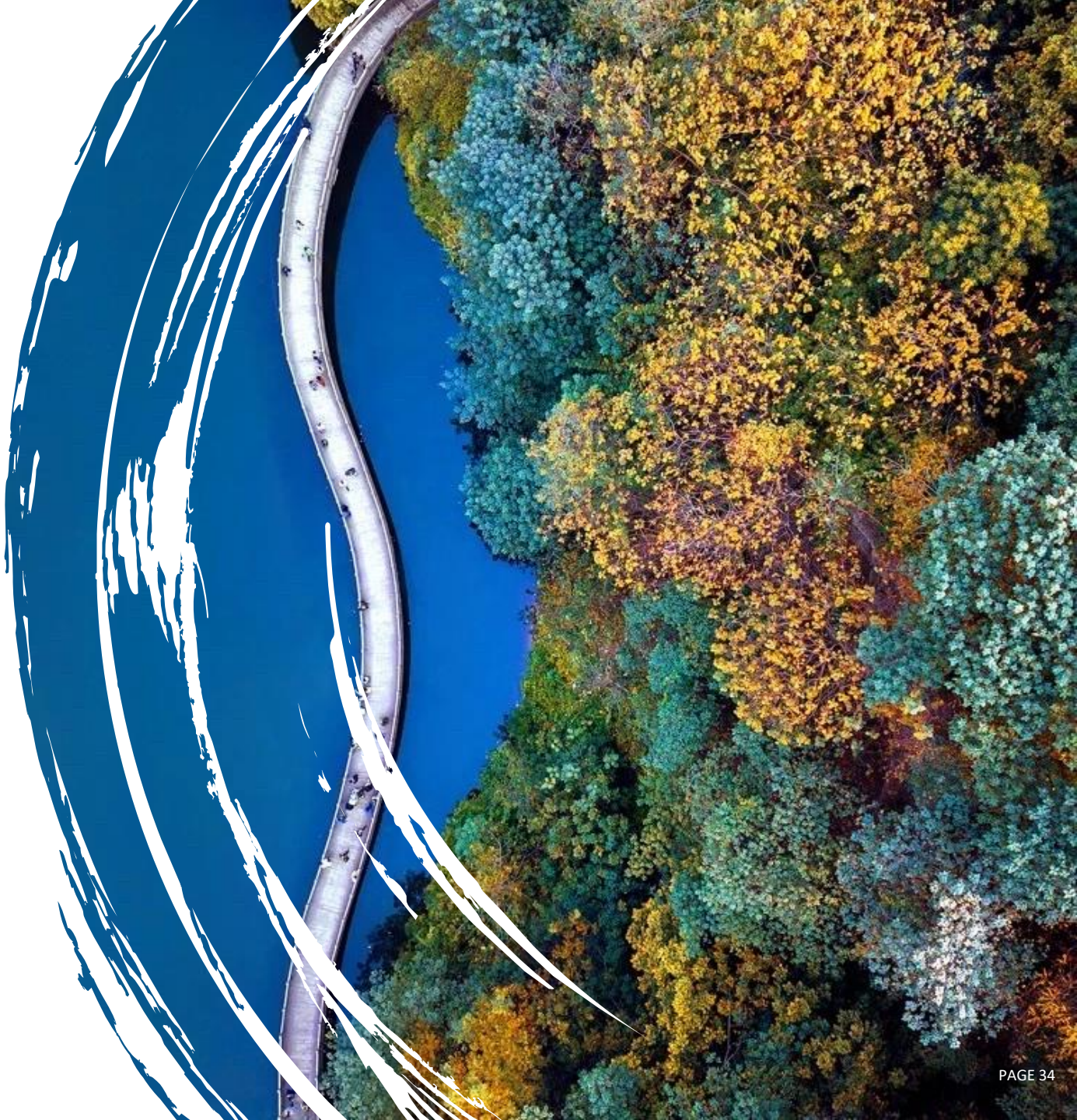
Queensland Government

- **Disadvantaged job seekers** in Toowoomba (Social Partner: Ability Enterprises)
- assist **families** living in regional areas with their study needs and work commitments by reselling second-hand laptops for AUD$100 (Social Partner: Substation 33)
- Reduce GHG emissions from **Indigenous farming** projects (Partner: Aboriginal Carbon Foundation)

Supply chains: A missing link for sustainability

- Next Challenges

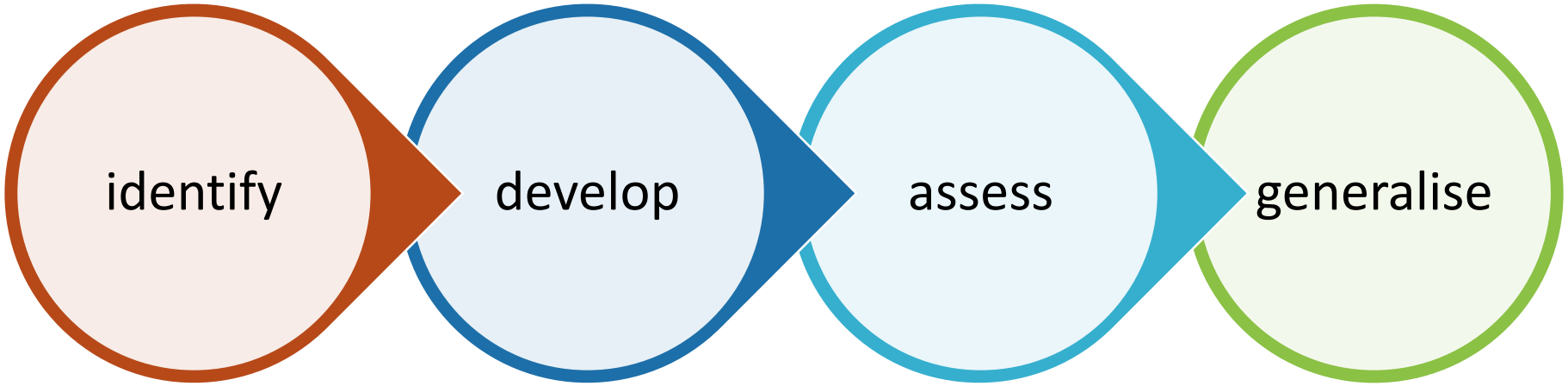
- Sustainability
- Resilience
- Capabilities
- SMEs



Next project:

Building Supply Chain for Sustainability and Resilience

Goal Building supply chain sustainability and resilience through procurement and collaborative practices



Sustainable Built Environment National Research Centre (SBEnrc), Australia

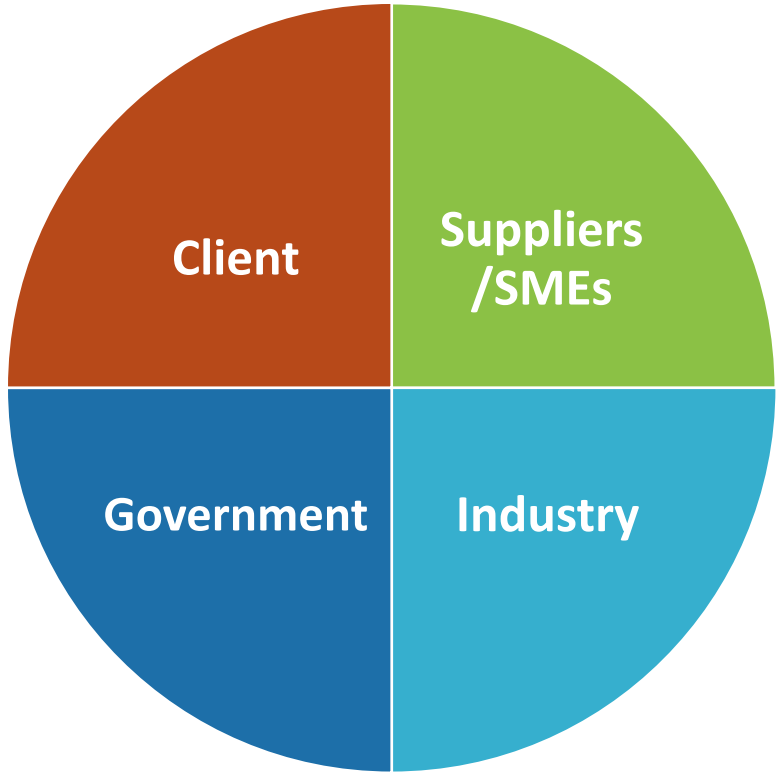
Sustainable Built Environment National Research Centre

The Sustainable Built Environment National Research Centre (SBEnrc) offers a unique industry-government-research collaboration to improve Australia's built environment industry.

The SBEnrc has the broadest built environment research alliance in the country, with Core Members including BGC, the Western Australian and Queensland Governments, Curtin University, RMIT University and Griffith University; all of which are represented on the Centre's Governing Board.

Read more

Benefits



Acknowledgements

Project Leader: Yingbin Feng, Western Sydney University

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Sherif Mohamed, Griffith University
Tiendung Le, RMIT University
Peng Zhang, Western Sydney University
Wenchi Shou, Western Sydney University
Vasilios Papastamoulis, Western Sydney University
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