



Sustainable Procurement **BUYING INTO A MORE SUSTAINABLE VALUE CHAIN**

Partner Briefing Session 16/03/2023

Chair: Davina Rooney CEO GBCA

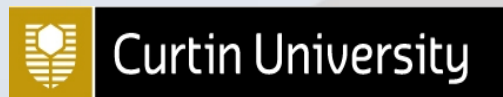
Project Leader: Associate Professor Yingbin Feng WSU



Sustainable
Built Environment
National Research Centre
AUSTRALIA

ACKNOWLEDGEMENTS

This research has been developed with support provided by Australia's Sustainable Built Environment National Research Centre (SBEnc). SBEnc develops projects informed by industry partner needs, secures national funding, project manages the collaborative research and oversees research into practice initiatives. Core Members of SBEnc include ATCO, BGC Australia, Government of Western Australia, Queensland Government, Curtin University, Griffith University, RMIT University and Western Sydney University. This research would not have been possible without the valuable support of our core industry, government and research partners.



Sustainable Procurement Theme



P2.76
Sustainable Procurement
2020-2022 (completed)

P2.86
Developing Sustainable
and Resilient Supply
Chains
2021-2023 (ongoing)



Project 2.76 Sustainable Procurement

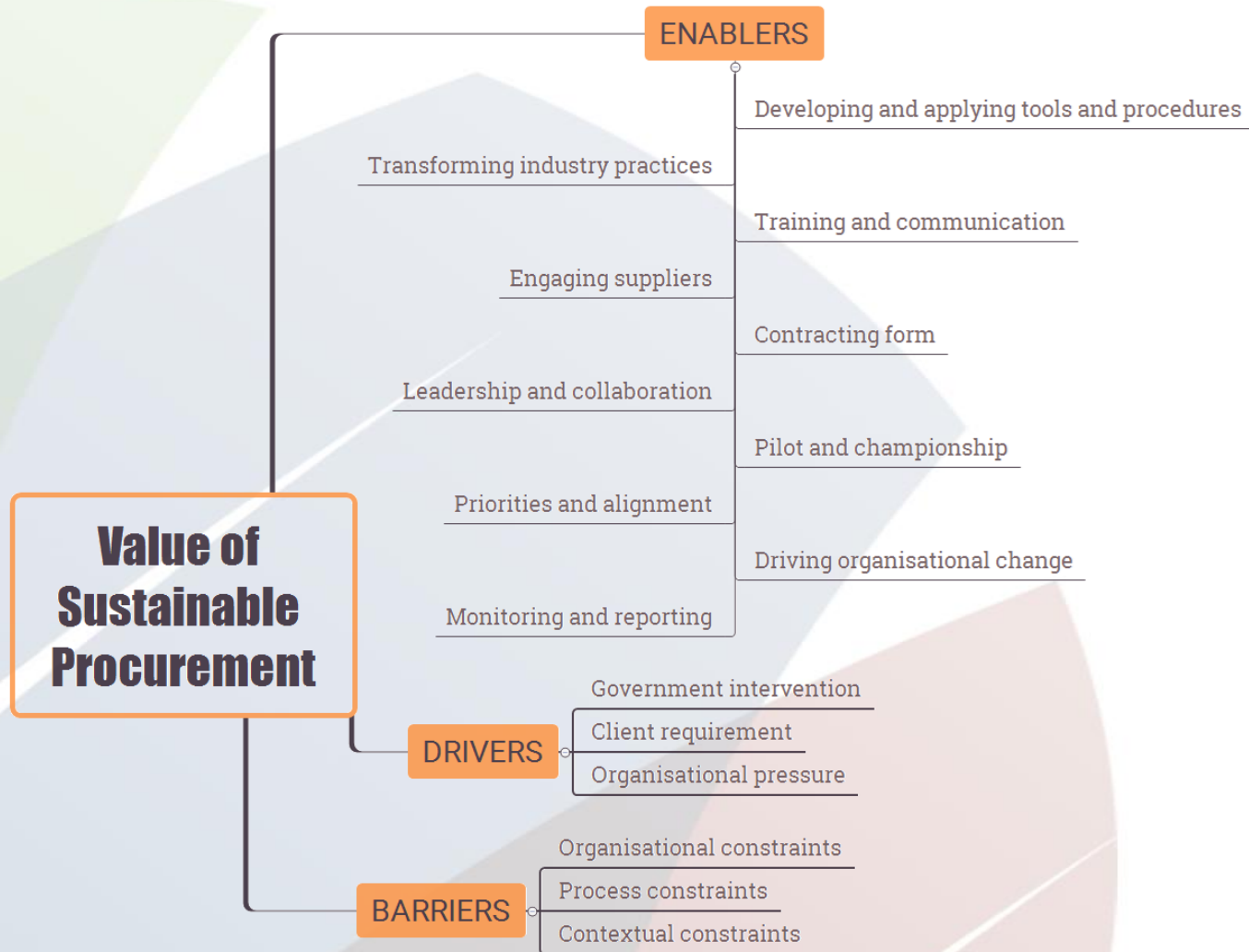
Industry outcomes



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

Drivers, barriers and enablers



2022 Global Workforce Trends

Discover What Collaborative Communication Approaches Can Help Increase Innovation.

Globalization Partners [Open >](#)

Sustainable procurement: Buying into a more sustainable construction value chain

YINGBIN FENG, WESTERN SYDNEY UNIVERSITY, DAVINA ROONEY, GREEN BUILDING COUNCIL OF AUSTRALIA AND VASILIOS PAPANASTASIOU, WESTERN SYDNEY UNIVERSITY

18 JULY 2022 UPDATED 27 JULY 2022



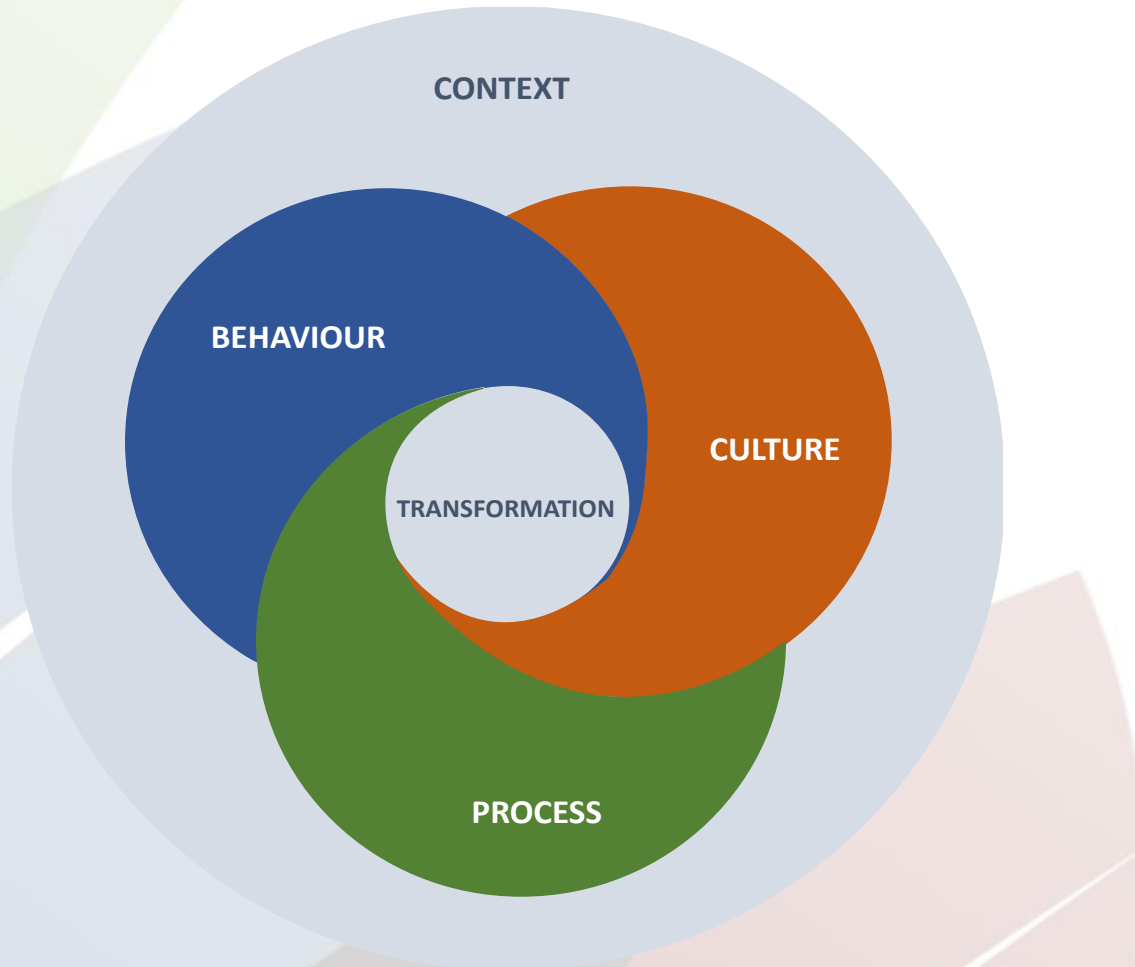
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TRENDING

- Nikola Tesla dreamed of free electricity; what happened?
- Hot property: Where to buy for the

Industry Practice Transformation



MATERIALS

Four things that need to change with stakeholders to build sustainable procurement

SALMAN SHOOSHARIAN, RMIT UNIVERSITY; TIENDUNG (TJ) LE, RMIT UNIVERSITY; YINGBIN FENG, WESTERN SYDNEY UNIVERSITY; LOUIS BETTINI, MAIN ROADS WESTERN AUSTRALIA
1 NOVEMBER 2021 UPDATED 2 NOVEMBER 2021



Sustainable procurement enables an organisation to meet its needs for goods, services, works and utilities in a way that achieves value for money on a whole-of-life basis. Sustainable procurement delivers benefits to the organisation, society, and the economy, and minimises damage to the environment.

TRENDING

- Nikola Tesla dreamed of free electricity; what happened?
- Ninety per cent of Australian consumers want sustainable products
- The secret to sustainable construction? Employ more women?
- EY mandates green leases in sustainability push
- What Australian cities can learn from New York City's building emissions laws
- On Green Buildings 2.0, GBCA's Transform and this "crazy" idea to save the planet through the built environment
- Charging ahead? Volkswagen boss names the big barriers to EVs success – and says stay away from hydrogen

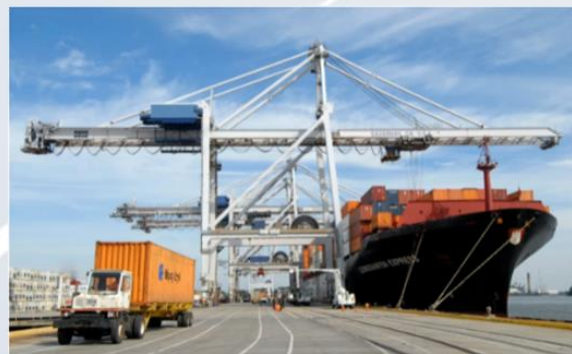


Actions in response to COVID-19



Sustainable Procurement: What we learned from COVID-19

SAVINDI CALDERA, GRIFFITH UNIVERSITY, SHERIF MOHAMED, GRIFFITH UNIVERSITY, YINGBIN FENG, WESTERN SYDNEY UNIVERSITY AND CARL BARRETT, BGC
5 JULY 2021 | UPDATED 7 JULY 2021



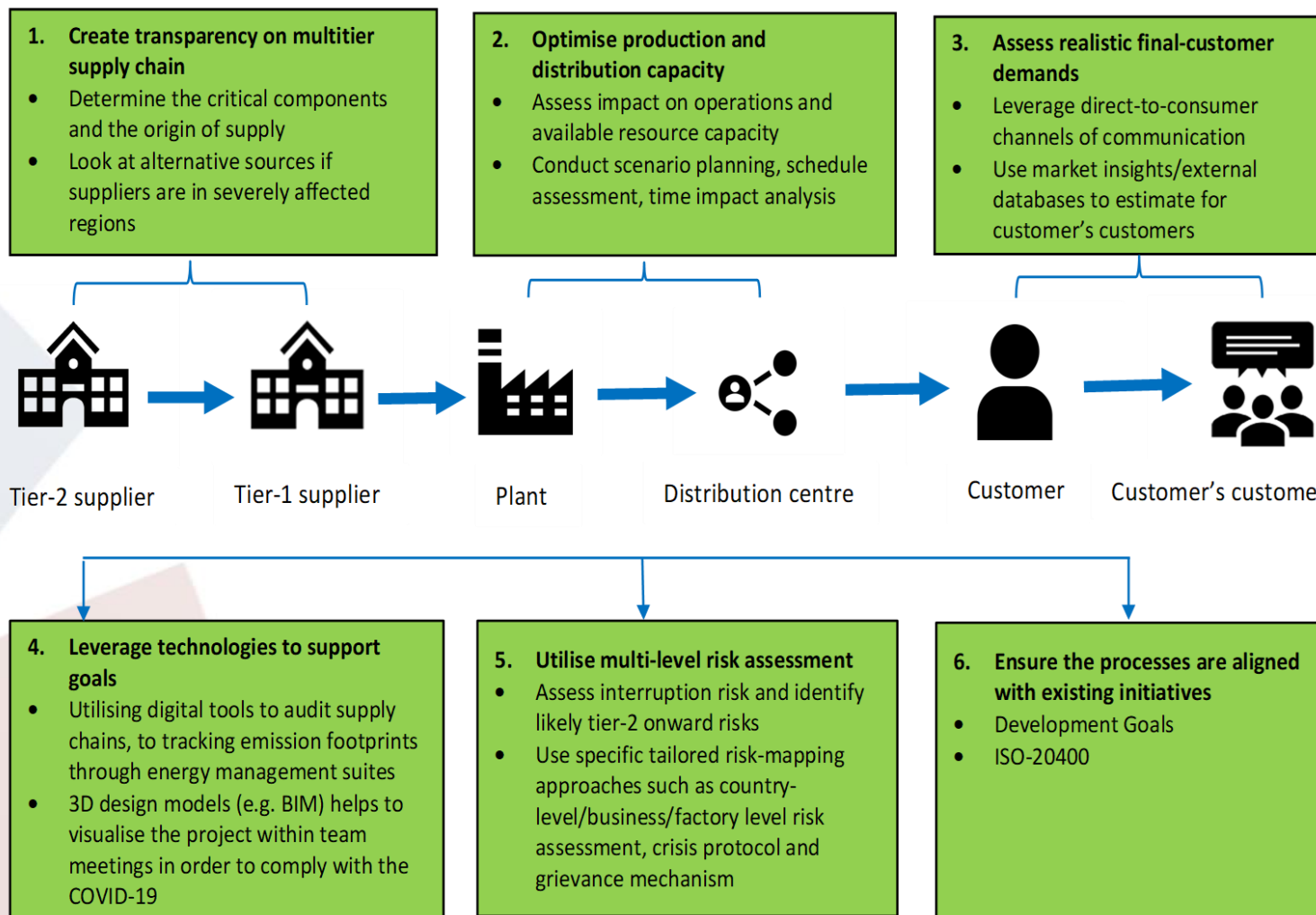
Some of the key events implemented in the wake of Covid include: developing reliable, transparent, and local supply chains; leveraging innovative tools and digital engineering approaches; creating a coalition between government and industry; integrating Modern Slavery Act and procurement guidelines; and assessing risks at multiple levels emerged through the focus group discussions.

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Covid-19 pandemic has brought global economies to a standstill and has created challenges to a variety of sectors including housing, building and infrastructure. Many business and government organisations have experienced some form of supply chain

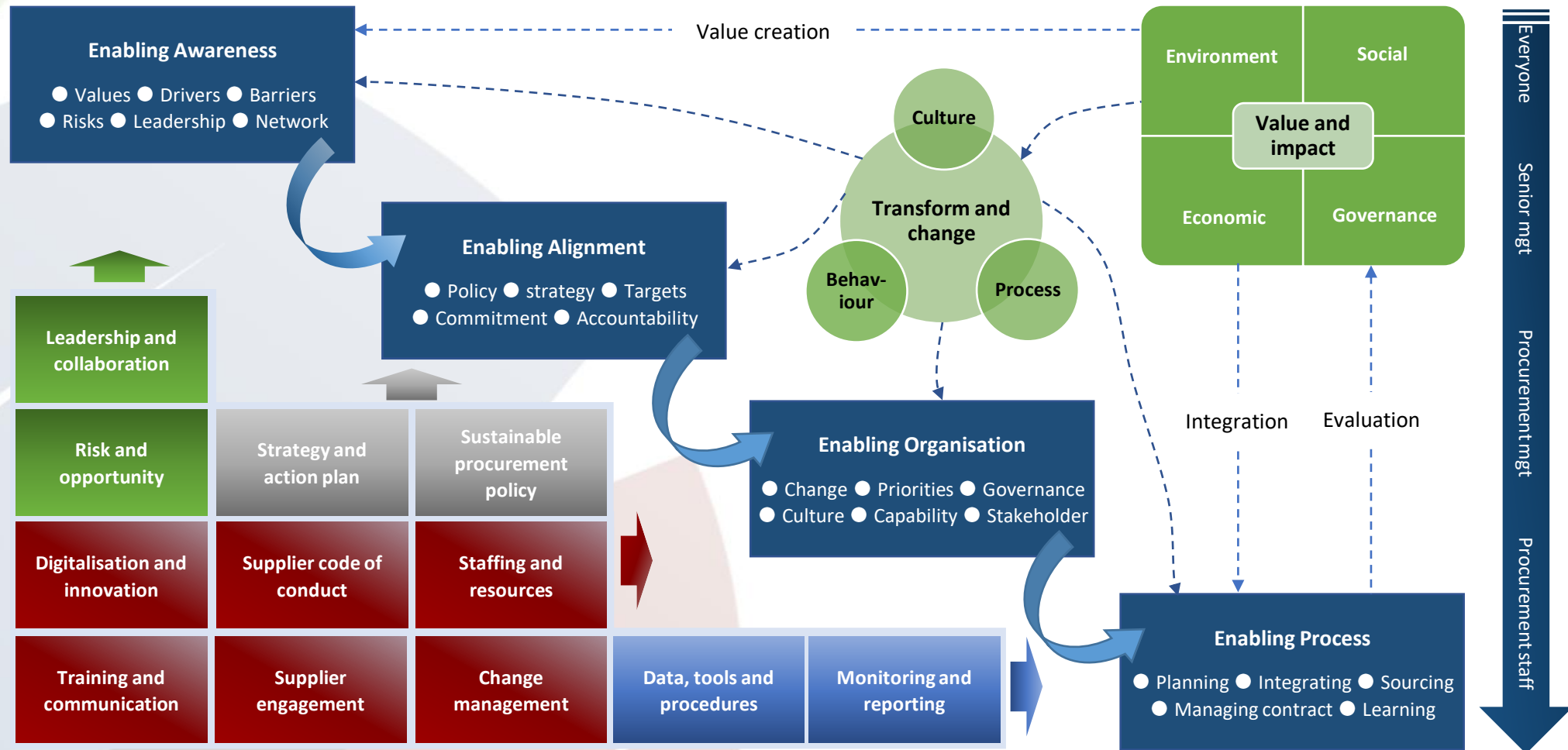
TRENDING

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- On Green Buildings 2.0, GB Transform and this "crazy" the planet through the built





Framework for enabling sustainable procurement



Case studies



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





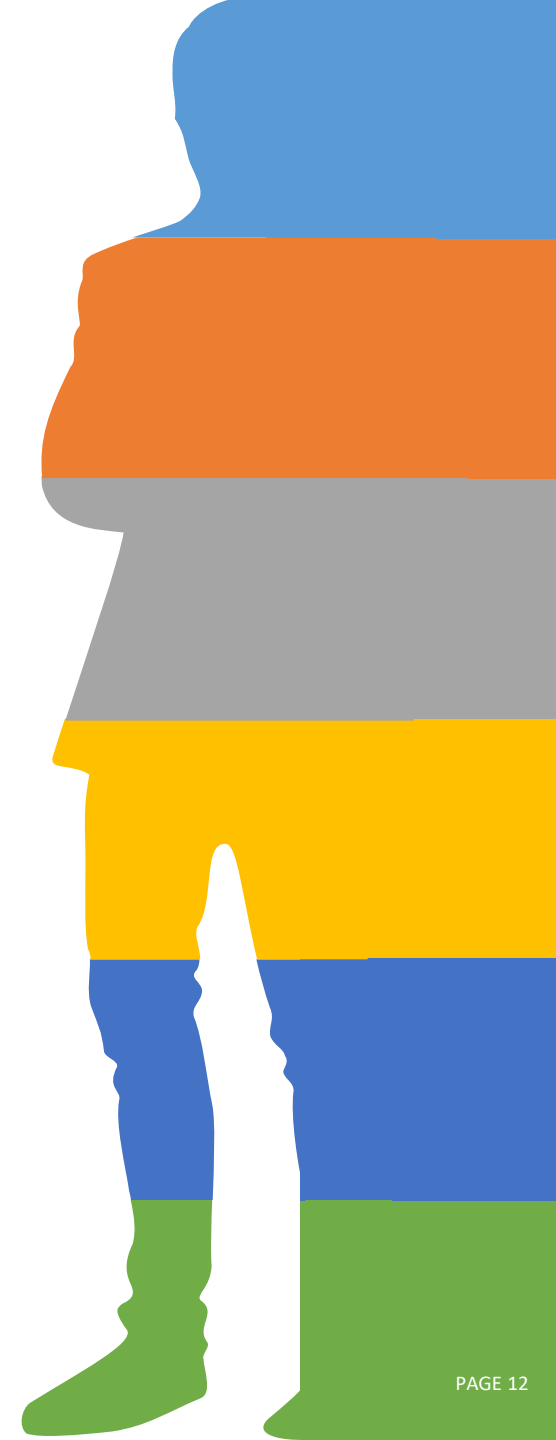
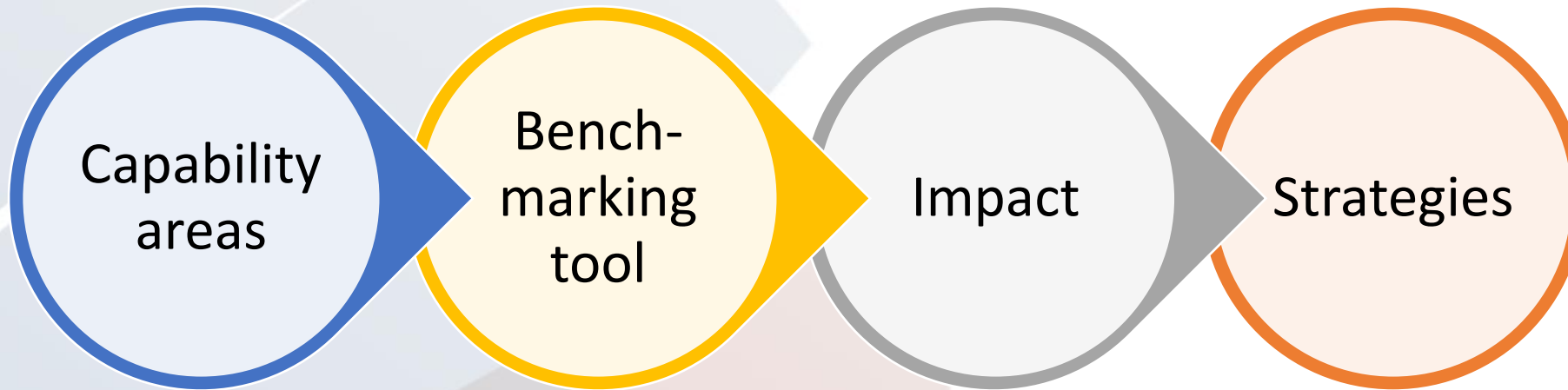
Project 2.86 Developing Sustainable and Resilient Supply Chains

Project 2.86

Building Supply Chain for Sustainability and Resilience

Goal

improve supply chain sustainability and resilience and provide practical recommendations for clients and suppliers to deliver sustainable and resilient products and services



Key organisational and management processes

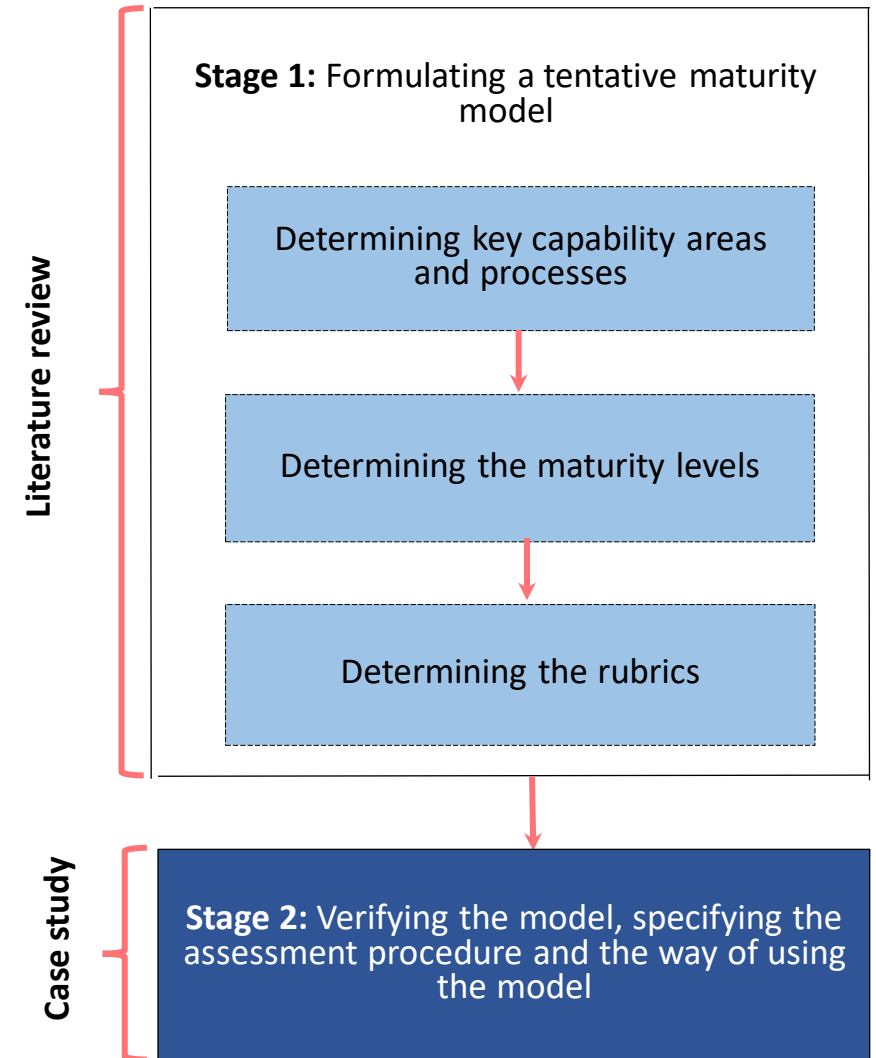


Maturity modelling

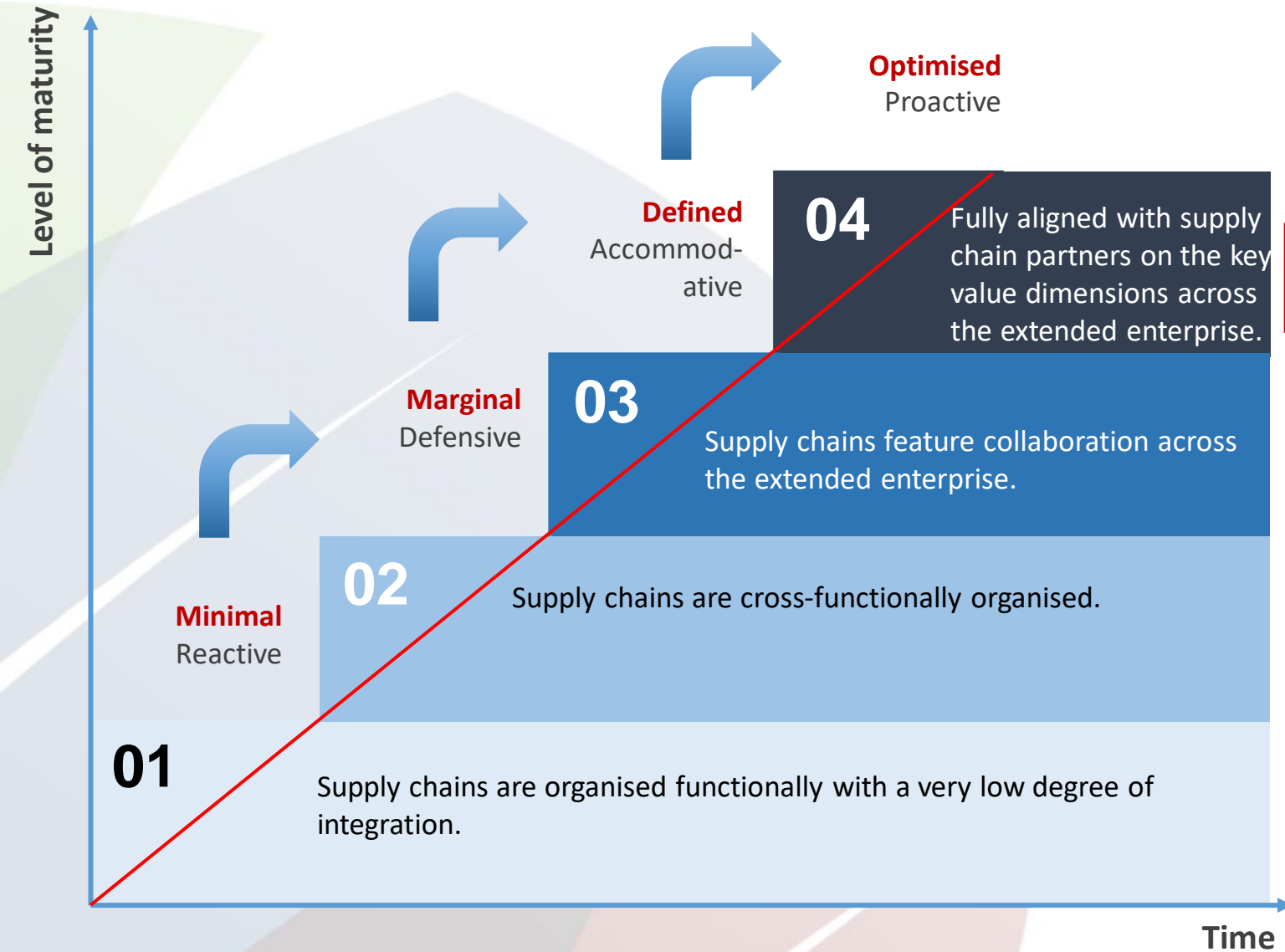


Maturity of sustainable and resilient supply chain

Capability areas	Maturity levels			
	Reactive (minimal)	Defensive (marginal)	Accommodative (defined)	Proactive (optimised)
CA01 Leadership & strategy				
CA02 Risk & opportunity		Rubrics		
CA03 Organisation & management				
CA04 Procurement & process				
CA05 Alignment & integration				
CA06 Data & knowledge				



Example – CA05 Alignment and Integration

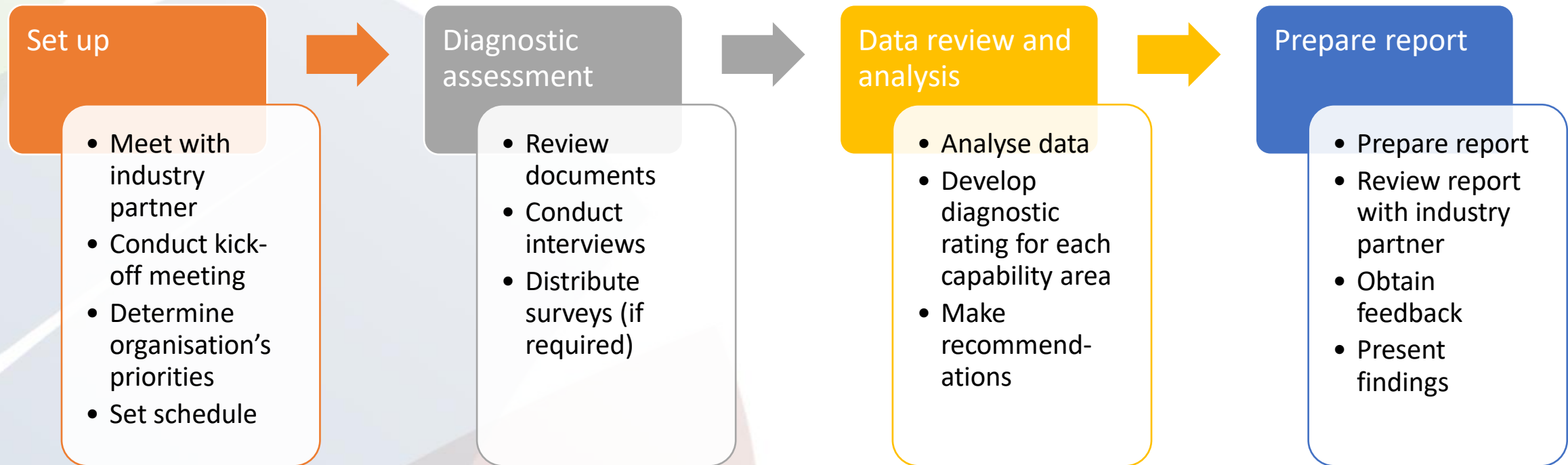


Actions – Maturity level 4

Action Code	Description
CA5.M4.A1	Align key customer value dimensions across the extended enterprise and value chain
CA5.M4.A2	Identify emerging value chain patterns in complex dynamic environments
CA5.M4.A3	Develop customer-supplier joint initiatives to improve sustainability and resilience with proactive support of key tier 1 suppliers
CA5.M4.A4	Align the procurement strategy with supplier relationships to create deep and strong relationships with the supplier network.
CA5.M4.A5	Pay focused attention to the different categories of suppliers (e.g. strategic, SMOs, vulnerable suppliers)



Typical maturity assessment process



MAB Tool

SBEnC Project 2.86 Developing Sustainable and Resilient Supply Chains - Maturity Assessment Tool

Instructions

Name of organization: _____
 Type of organization: _____
 City/State: _____
 Name of Assessor: _____
 Year of Assessment: _____

Purpose of this Maturity Assessment Tool is to help your organisation to assess its capability in developing supply chain sustainability and resilience. This tool enables your Organisation to self-assess its maturity level on the capability area (CA) including:

- CA1 - Leadership and Strategy
- CA2 - Risk and Opportunity
- CA3 - Organisation and Management
- CA4 - Procurement and Process
- CA5 - Alignment and Integration
- CA6 - Data and Knowledge

There are six maturity levels defined for each capability area:

- Level 1 (Minimal) - Reactive
- Level 2 (Marginal) - Defensive
- Level 3 (Developing) - Accommodative
- Level 4 (Advanced) - Proactive

There are six maturity levels defined for each capability area:

- 1 indicates that your organisation performs below the minimum level.
- 2 indicates that the specific defined maturity level is not fully implemented.
- 3 indicates that your organisation performs above the specific defined maturity level.

Please use the following drop-down menu to set the field score for each maturity level, where you can select the relevant value (1, 2, 3, 4, 5).

Based on this assessment, an aggregate score for each CA will be calculated and your organisation will be ranked accordingly. The value in the overall rating table ranges from 0-2 rank your Organisation to Maturity Level 1 from an overall perspective and 4-6 rank your Organisation to Maturity Level 3 from an overall perspective.

For each CA there are specific 'Action' that your organisation needs to consider to achieve the relevant maturity level. There is a drop-down menu next to each 'Action' through which the tool guides you to select relevant 'Action' relevant to your organisation, in place or not been considered but not been implemented yet. You are able to select the relevant 'Action' from a list of 'Action' that your Organisation's situation best reflects the suggested 'Action'.

The result is a summary visualization of your assessment, which gives you an overall overview of your organisation's progress across the six capability areas.

How it works?

For instance, if you go on the green tab 'CA1 Leadership & Strategy' and select 'RE' (e.g. for the Action 'CA1.M1.A1' from the drop-down menu in the column 'Action in place'), you will see that the colour pattern changes to blue colour automatically. This design is also visible to the 'View' tab 'Visualise' and according to the legend it means that this specific 'Action' has been completed. However, if you select 'Partly or Not', then the colour pattern changes to green or orange colour, respectively. The legend colour and the legend 'Action' will be on same while the orange one means that the 'Action' has been considered but not started yet.

Assessors to signpost the sheet:

SBEnC Project 2.86 Developing Sustainable and Resilient Supply Chains - Maturity Assessment Tool

Capability Area 1: Leadership and strategy

Assessors: _____

Score: _____

Maturity Level 1: Reactive (Minimal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 1

Progress Level

Action Code

Maturity Level 2: Defensive (Marginal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 2

Progress Level

Action Code

Maturity Level 3: Accommodative (Developed)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 3

Progress Level

Action Code

CA1 Leadership & Strategy

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Capability Area 2: Risk and opportunity

Assessors: _____

Score: _____

Maturity Level 1: Reactive (Minimal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 1

Progress Level

Action Code

Maturity Level 2: Defensive (Marginal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 2

Progress Level

Action Code

Maturity Level 3: Accommodative (Developed)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 3

Progress Level

Action Code

CA2 Risk & Opportunity

SBEnC Project 2.86 Developing Sustainable and Resilient Supply Chains - Maturity Assessment Tool

Capability Area 3: Organisation and management

Assessors: _____

Score: _____

Maturity Level 1: Reactive (Minimal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 1

Progress Level

Action Code

Maturity Level 2: Defensive (Marginal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 2

Progress Level

Action Code

Maturity Level 3: Accommodative (Developed)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 3

Progress Level

Action Code

CA3 Organisation & Management

SBEnC Project 2.86 Developing Sustainable and Resilient Supply Chains - Maturity Assessment Tool

Capability Area 4: Procurement and process

Assessors: _____

Score: _____

Maturity Level 1: Reactive (Minimal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 1

Progress Level

Action Code

Maturity Level 2: Defensive (Marginal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 2

Progress Level

Action Code

Maturity Level 3: Accommodative (Developed)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 3

Progress Level

Action Code

CA4 Procurement & Process

SBEnC Project 2.86 Developing Sustainable and Resilient Supply Chains - Maturity Assessment Tool

Capability Area 5: Alignment and integration

Assessors: _____

Score: _____

Maturity Level 1: Reactive (Minimal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 1

Progress Level

Action Code

Maturity Level 2: Defensive (Marginal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 2

Progress Level

Action Code

Maturity Level 3: Accommodative (Developed)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 3

Progress Level

Action Code

CA5 Alignment & Integration

SBEnC Project 2.86 Developing Sustainable and Resilient Supply Chains - Maturity Assessment Tool

Capability Area 6: Data and knowledge

Assessors: _____

Score: _____

Maturity Level 1: Reactive (Minimal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 1

Progress Level

Action Code

Maturity Level 2: Defensive (Marginal)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 2

Progress Level

Action Code

Maturity Level 3: Accommodative (Developed)

Description of low capability to be displayed by organisations at this stage

Notes on Maturity Level 3

Progress Level

Action Code

CA6 Data & Knowledge

SBEnC Project 2.86 Developing Sustainable and Resilient Supply Chains - Maturity Assessment Tool

Summary of Results

Overall Score = 0

Legend: Not Applicable, Not Started, Changing, Complete

Capability Area	Maturity Level 1: Reactive (Minimal)	Maturity Level 2: Defensive (Marginal)	Maturity Level 3: Accommodative (Developed)	Maturity Level 4: Proactive (Perfected)
CA1 Leadership & Strategy	CA1.M1.A1	CA1.M2.A1	CA1.M3.A1	CA1.M4.A1
CA2 Risk & Opportunity	CA2.M1.A1	CA2.M2.A1	CA2.M3.A1	CA2.M4.A1
CA3 Organisation & Management	CA3.M1.A1	CA3.M2.A1	CA3.M3.A1	CA3.M4.A1
CA4 Procurement & Process	CA4.M1.A1	CA4.M2.A1	CA4.M3.A1	CA4.M4.A1
CA5 Alignment & Integration	CA5.M1.A1	CA5.M2.A1	CA5.M3.A1	CA5.M4.A1
CA6 Data & Knowledge	CA6.M1.A1	CA6.M2.A1	CA6.M3.A1	CA6.M4.A1

Visualisation of results

Case study – MRWA – CA3



Capability Area 3: Organisation & Management



Overall Score = 8



CA3.M1.A1	CA3.M2.A1	CA3.M3.A1	CA3.M4.A1
CA3.M1.A2	CA3.M2.A2	CA3.M3.A2	CA3.M4.A2
CA3.M1.A3	CA3.M2.A3	CA3.M3.A3	CA3.M4.A3
CA3.M1.A4	CA3.M2.A4	CA3.M3.A4	CA3.M4.A4
CA3.M1.A5		CA3.M3.A5	



Case study – MRWA – CA4

Capability Area 4: Procurement & Process



Overall Score = 2

Not Applicable
Relevant - Complete
Relevant - Ongoing
Relevant - Not Started

CA4.M1.A1	CA4.M2.A1	CA4.M3.A1	CA4.M4.A1
CA4.M1.A2	CA4.M2.A2	CA4.M3.A2	CA4.M4.A2
CA4.M1.A3	CA4.M2.A3	CA4.M3.A3	CA4.M4.A3
CA4.M1.A4	CA4.M2.A4	CA4.M3.A4	CA4.M4.A4
CA4.M1.A5	CA4.M2.A5	CA4.M3.A5	CA4.M4.A5

Case study – BGC – CA4



Capability Area 4: Procurement & Process



Overall Score = 3



CA4.M1.A1	CA4.M2.A1	CA4.M3.A1	CA4.M4.A1
CA4.M1.A2	CA4.M2.A2	CA4.M3.A2	CA4.M4.A2
CA4.M1.A3	CA4.M2.A3	CA4.M3.A3	CA4.M4.A3
CA4.M1.A4	CA4.M2.A4	CA4.M3.A4	CA4.M4.A4
CA4.M1.A5	CA4.M2.A5	CA4.M3.A5	CA4.M4.A5



Benefits

- Roadmap
- Benchmark
- Red flag and prioritise interventions
- Educate



This research would not have been possible without the ongoing support of our core industry, government and research partners:



WESTERN AUSTRALIA



Queensland
Government



WESTERN SYDNEY
UNIVERSITY





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