

**Making greenhouse gas inventories
meaningful for infrastructure:
A case study for learning**

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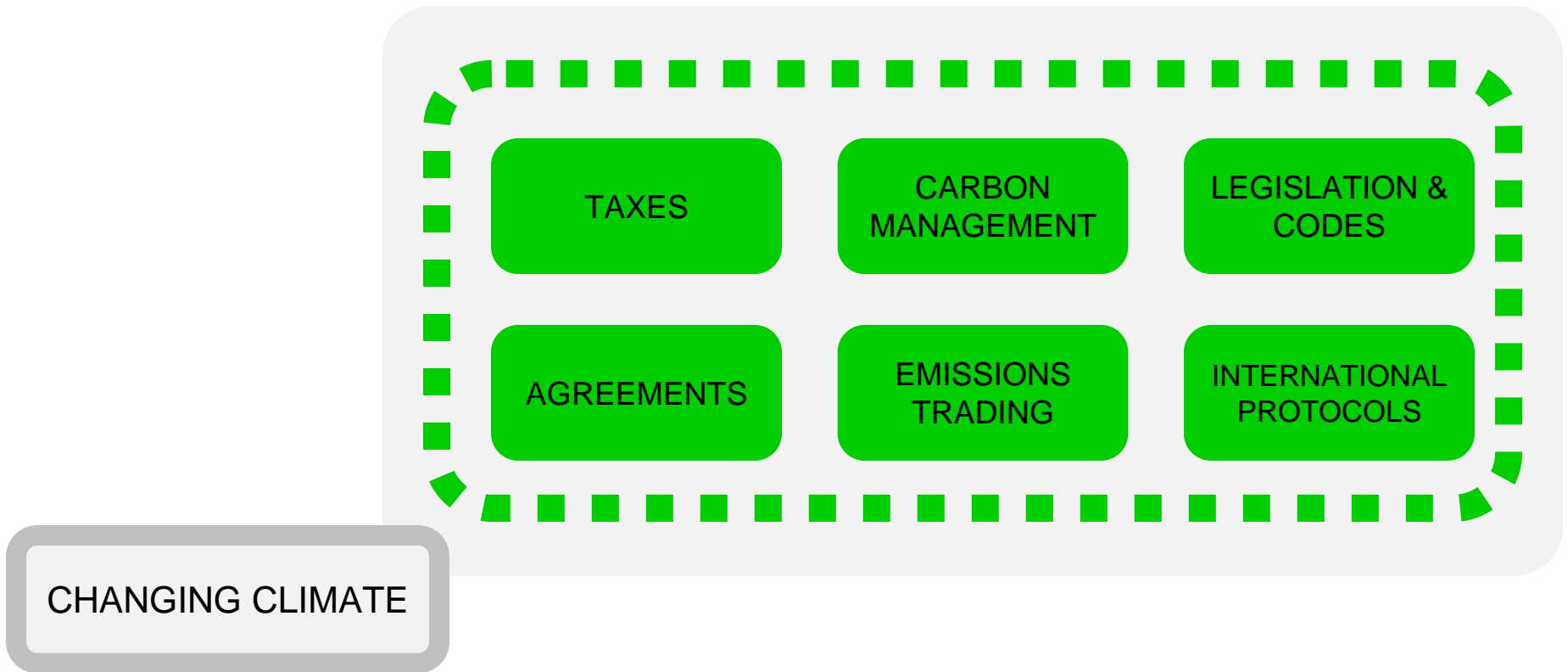
MWH

BUILDING A BETTER WORLD

Overview

- Why are we here?
- Case Study: Orion NZ Ltd
- Drivers
- Challenges
- Where to from here?

Why are we here?



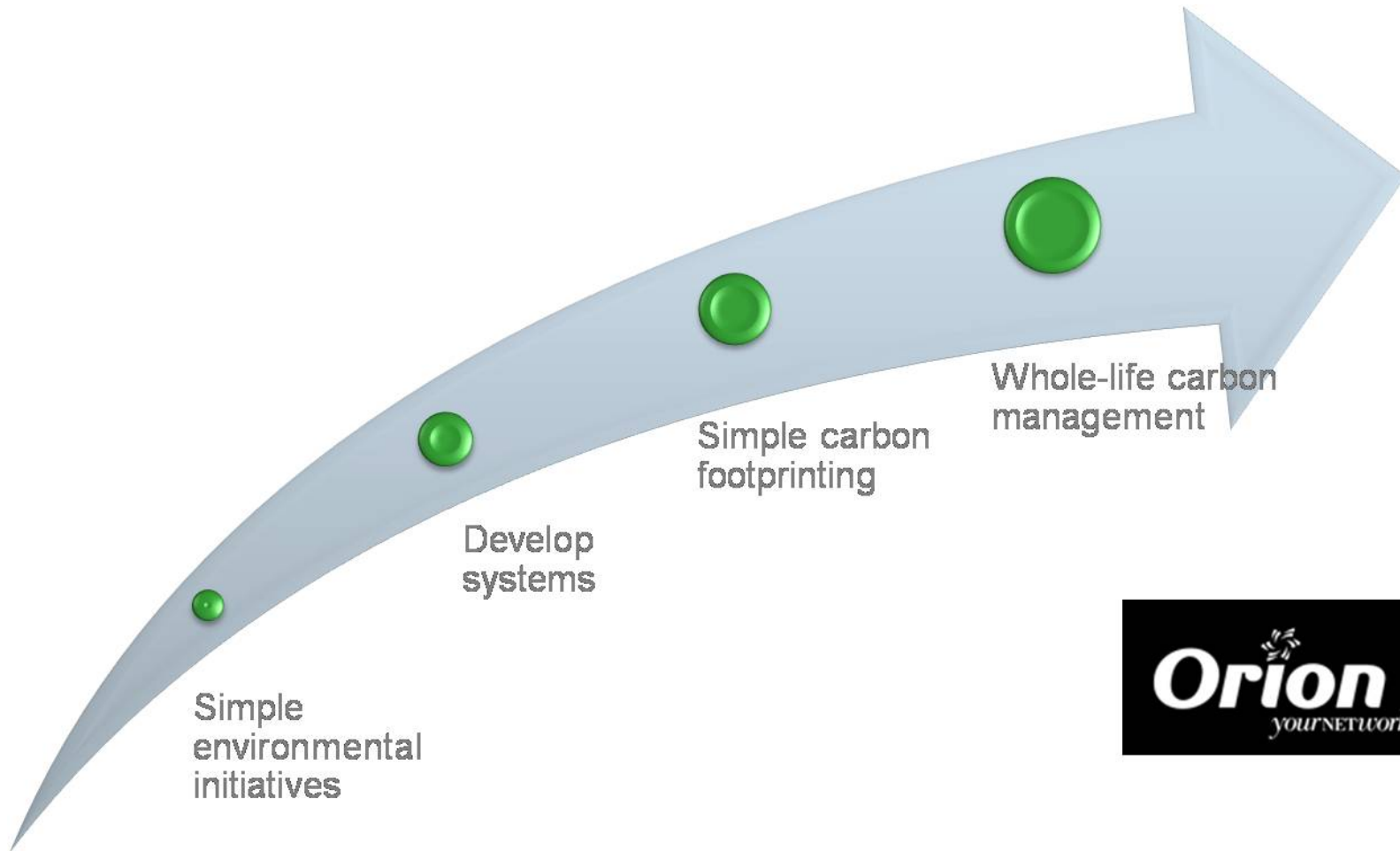
Orion

- ⚡ 186,000 customers
- ⚡ 3,000 GW
- ⚡ 14,000 km of cables/lines

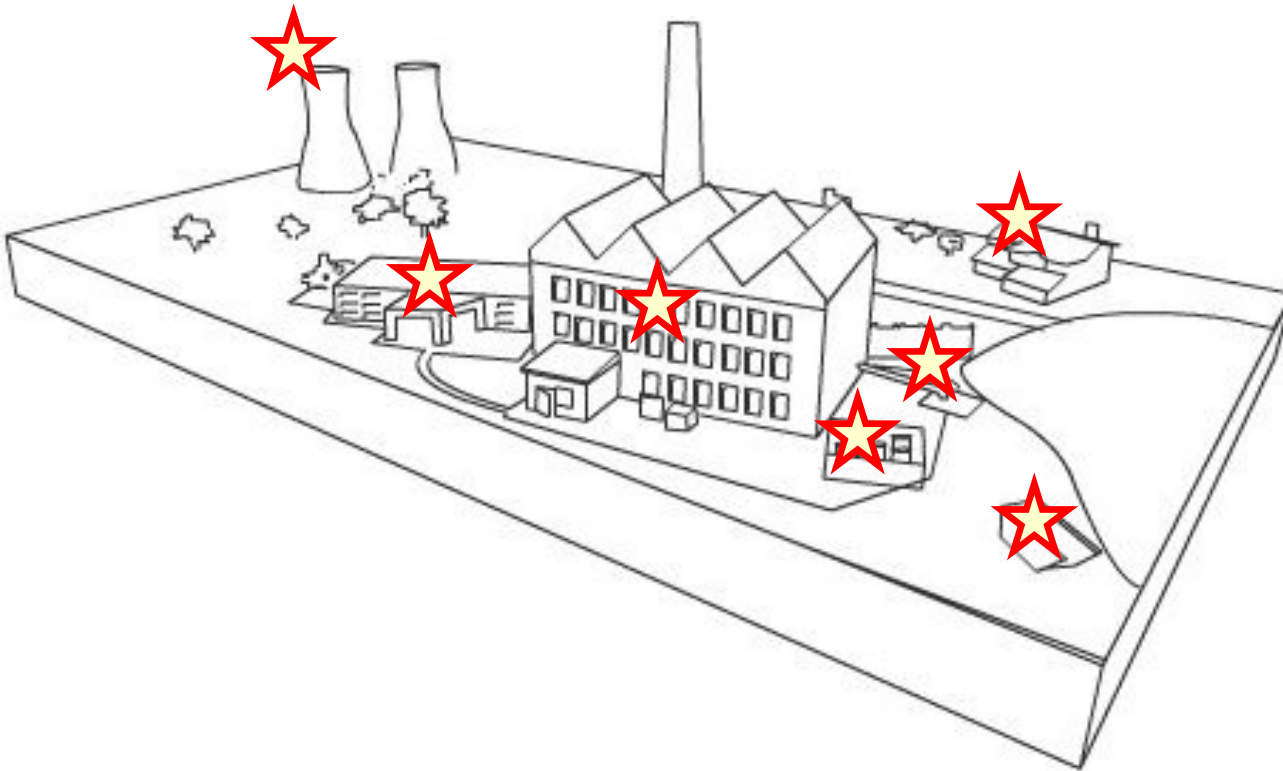
Orion
your network



Orion's journey



What to include



'Traditional'

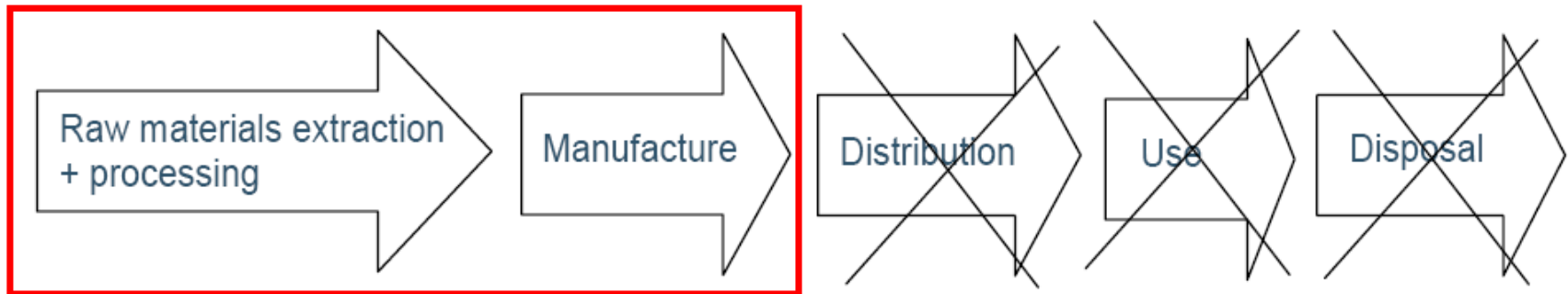
Electricity
Fuel use
Gas use
Waste

Whole-Life Approach

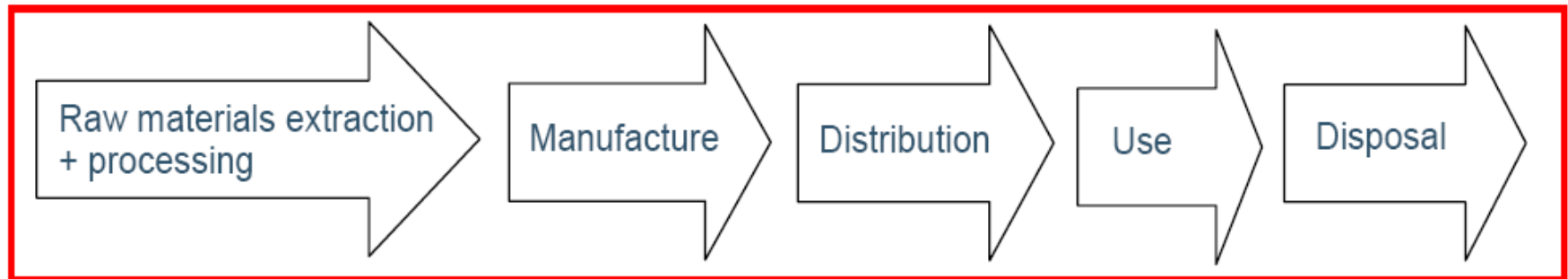
Embodied carbon

Measuring embodied carbon

Cradle to Gate



Cradle to Grave



Lessons learned

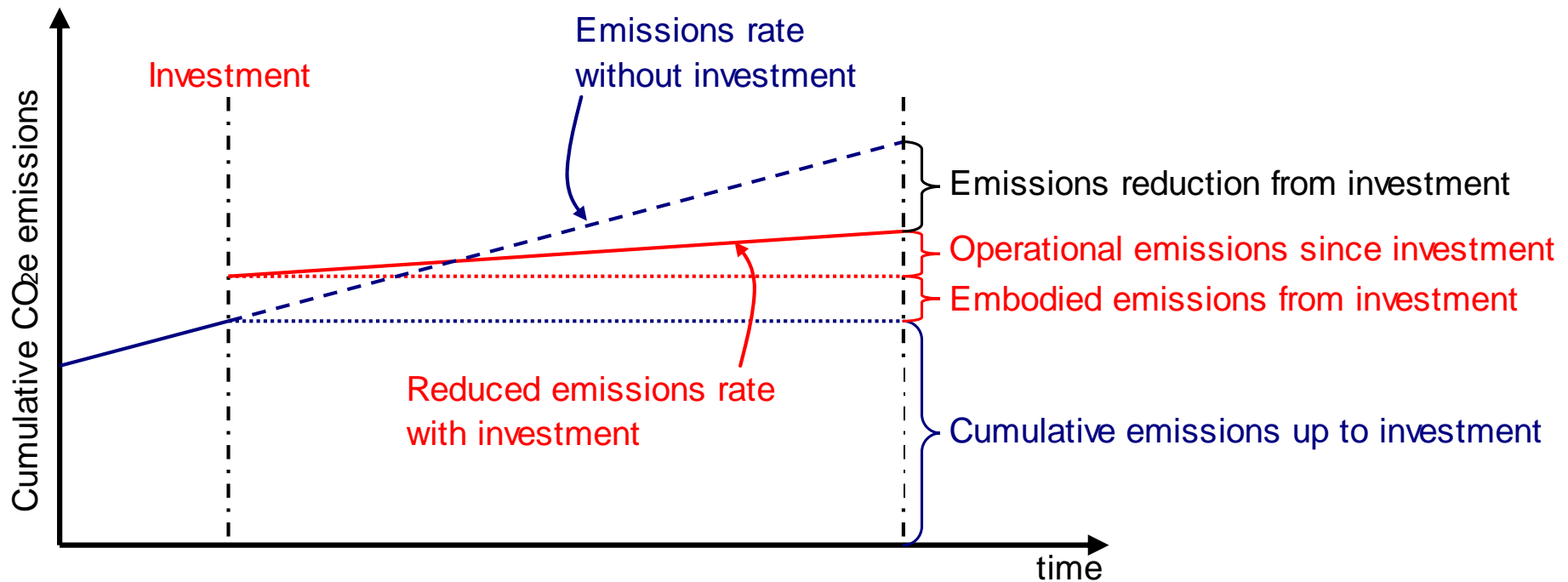
- Scope, commitment and resources
- Objectives & expectations
- Lack of understanding & standardisation

Factors affecting quality of data

- Data:
 - Not New Zealand specific
 - Aggregation
 - Missing

Where to from here?

- Understanding the environmental benefit of Demand Side Management



Where to from here?

- Understanding the environmental benefit of Demand Side Management
- Selection of specific assets
- Collecting better data
- Sustainable decision making?
- Offset?