Supply Chain Case Studies

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19/03/2018
Our mission is to accelerate the move to a sustainable, low carbon economy.
Business can take a lead on climate change by using long-range thinking to drive cycles of action.
The investment community can drive climate risk planning from sustainability teams into boardrooms

The TCFD provides an accessible framework for businesses to assess and communicate climate risks to investors and other stakeholders; other approaches exist which further develop the business scenarios.

Core Elements of Recommended Climate-Related Financial Disclosures

- **Governance**: The organization's governance around climate-related risks and opportunities.
- **Strategy**: The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.
- **Risk Management**: The processes used by the organization to identify, assess, and manage climate-related risks.
- **Metrics and Targets**: The metrics and targets used to assess and manage relevant climate-related risks and opportunities.

*Source: TCFD, Final Recommendations Report 2017*
350 leading businesses have now committed to a science-based target, since COP 21 in Paris

The range of organisations covers 350 organisations in 35 countries, across almost every sector.
Science-based targets are rapidly becoming established practice among corporates.

Of responding CDP Supply Chain suppliers:

- 20% indicated their emissions targets were science-based
- 21% anticipate setting a science-based target in the next two years

**SBTI COMMITMENTS AND TARGETS BY LEADING COUNTRIES**

<table>
<thead>
<tr>
<th>Country</th>
<th>Committed</th>
<th>Targets approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>43</td>
<td>21</td>
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<tr>
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</tr>
<tr>
<td>22 others</td>
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</tbody>
</table>

Source: SBTi data, March 2018

Source: CDP Supply Chain Report 2017/18
Value chain data enhances a company’s decision-making ability and multiplies its positive impact.

**Design better products**

**Operations**

**Efficiency, engagement**

**Value Chain data enables better decisions**

**Procurement and Supply Chain**

**Brand / Investor Relations**

**Sales and Marketing**

**Corporate**

**Reporting, Science-based targets**

**Product differentiation**

**Supply chain innovation**

**Supply chain collaboration**

**Increased credibility / trust**

**Sustainability leadership**

Context for the value chain footprint:
60% to 95% of a company’s environmental impacts typically occur in the wider value chain.
An effective value chain data strategy applies priorities

Methodologies differ based on materiality of categories

Life Cycle Assessment (LCA)
- Uses quantity data, and multiplies by emissions factors in kgCO2e/kg.
- Factors are much more specific, with a lower level of uncertainty; often taken from prior product footprinting work.

Environmentally Extended Input/Output data (EEIO)
- Uses spend data, and multiplies by emissions factors in kgCO2e/$.
- Factors are an average for a sector of the economy – so result has high uncertainty and low specificity.

More resource intensive
More accurate for high materiality
Good for decision making

Cheap, Quick option
High level – lacks detail

The materiality and business objective will determine the calculation methodology
Levels of innovation in circular economy business models are significant and increasing.

A key challenge to scaling up the circular economy is understanding how to embed it within business models, to create and capture value while delivering sustainable outcomes.
The CDP Supply Chain programme continues to show evidence of significant progress by the leaders.

Source: Carbon Trust, CDP Supply Chain Report 2017 (adapted)
At COP21 in Paris, Kellogg formally announced that it would align its own emissions reductions with a below 2°C pathway, becoming one of the first global companies to commit to a science-based target. This included setting 2050 goals of reducing scope 1 and 2 emissions by 65% and a scope 3 target of achieving a 50% reduction, both on an absolute basis compared to 2015.

One of the first obstacles to delivering on Kellogg’s supply chain target is simply getting an accurate baseline for its 2015 scope 3 emissions - this is still being refined through asking direct suppliers to report high quality primary data through the CDP Supply Chain program, with the company now in its third year of data collection.

Actively engaging through the Kellogg’s Origins™ Programme across 294,000 farmers in 21 countries.
Launched the world’s first comprehensive supply chain management program that requires suppliers to set science-based emissions reduction targets.

The company estimates that if this goal is met it would help suppliers avoid 100 million tonnes of greenhouse gas emissions, the equivalent of taking 21 million cars off the road for a year.

By 2025 HPE aims to improve the energy performance of its portfolio by 30 times when compared to 2015; 60% of its full value chain footprint comes from the lifecycle emissions of products in use.

HPE is overcoming some of the complexities involved in developing science-based targets through providing active guidance and feedback to companies, alongside practical tools they are able to use.
CDP Supply Chain Case Study: Sky

- Lifecycle assessment on products provided understanding of most **material impacts** and where to act.
- Actively engaging with suppliers making up 80% of annual spend
- Made it mandatory for suppliers to **comply with industry standard**
- **Supplier collaboration** to reduced energy consumption of set-top boxes (Scope 3 use-phase)
- Material efficiencies through **product design** (embedded carbon)
- **Supporting supplier development and performance** through consultancy and joint initiatives.
- Adopting **circular economy ‘closed loop’ strategy** for new set-top boxes: ease of refurbishment; reverse logistics; product repair & recycling.
Moved away from audit/compliance focus to **performance and continuous improvement** with a ‘Supplier Sustainability Performance’ programme. *Has improved supplier relationships, dialogue, performance and innovation.*

Balanced scorecard approach to assessing and rating suppliers, with **differentiated engagement approach** based on **supplier maturity** and capabilities.

- ‘Best in class’: Exemplars to others; self-assessment
- ‘DIY’: Peer learning and best practice sharing
- Strategic but low maturity: Supplier Sustainability Improvement Plan

CEO Frans van Houten commitment to achieve **100% revenues from ‘circular solutions’ by 2025**. Business model innovation will be key.
• **De-coupling business growth from fossil fuels** by developing alternative feedstocks:
  - 100% renewable plant-based feedstock
  - Building up open loop supply chain of recycled plastic

• Response to both climate imperative as well as **customer demand** for sustainable products.

• On track to become world leader in bio-polymers.

• Improving performance and reliability of plastics supply chain:
  - **Collaborating with value chain partners** to improve quality of post-consumer plastic waste
  - **Co-investing and supporting improvement** of waste management and recycling infrastructure
**CDP Supply Chain Case Study: Ajinomoto**

- **Product design**
  - Reconfigured *product design* to include:
    - Environmental assessment at the product design stage
    - Scoring containers and packaging using Eco-Index assessment
  - Only company worldwide to sell drinks in 100% recycled heat-resistant PET bottles, saving 2,000 tonnes p.a. of virgin plastics from fossil fuels:
    - Collaborated with packaging supplier (Toyo Seikan Group) to achieve this for Blendy bottled coffee products assessment
    - Other collaborations with Acteiive Corporation, Dai Nippon Printing, SATO Green Engineering and Toyo-Morton
  - Recognising that 83% of its value chain impacts are outside its own operations, further *collaborative innovations* are set to include:
    - Plant-based bioplastics
    - Plastics which can sequester carbon during incineration
- **Supplier dev’t and collab.**
- **Industry and sector-level collaboration**
- **Collaborative innovation**
  - Introduced Aji-na Eco and Hotto-suru Eco *labels to communicate* sustainability improvements to consumers
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Published in the UK: 2017.

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