



Best practice approaches to internal carbon pricing

**A collaboration between Ecofys,
The Generation Foundation and CDP**

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Despite the increasing uptake of internal carbon pricing, impact on decarbonizing value chains remains limited

Enhancing GHG emission reduction impact of internal carbon pricing

1. Increase uptake of internal carbon pricing approaches
2. Improve existing approaches to best practice



What would be considered as best practice approaches?



Source: CDP, *Embedding a carbon price into business strategy*, September 2016.

A best practice internal carbon price could lead to an ambitious reduction of a company's carbon footprint and contribute to the achievement of the Paris Agreement



Achieve Paris-compatible company objectives (e.g. SBT)



Lead to actions from company and value chain partners



Focus on GHG emission hotspots in the value chain



Evaluate and realign the approach based on results

Note: Internal carbon pricing is a tool and companies can also choose to use other approaches to achieve GHG reductions, mitigate climate risks and find revenue opportunities

SBT = Science-based targets

The three dimensions of internal carbon pricing: a conceptual framework to best practice approaches

Height

Carbon price level

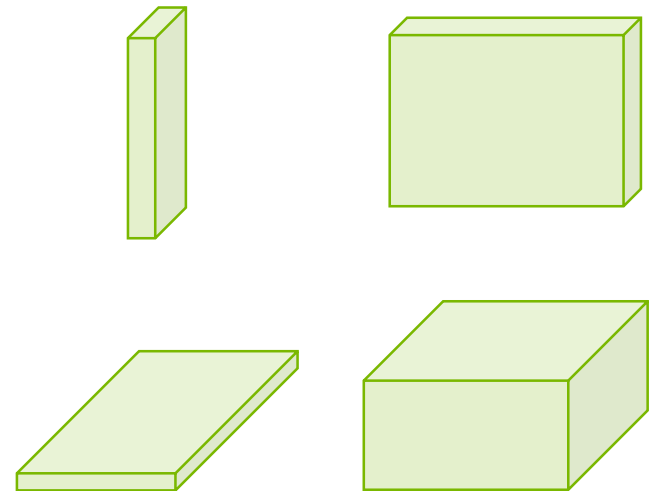
Depth

Business influence

Width

GHG emission coverage

Different shapes of internal carbon pricing



=

Impact on GHG
emissions

Companies use different methods to set their internal carbon price level(s)

In 2016, reported internal corporate carbon prices were in the range of US\$0.3-893/tCO₂e



Height

Carbon price level

Price setting approaches

Current compliance price

Future compliance price

Social cost of carbon

Implicit carbon price

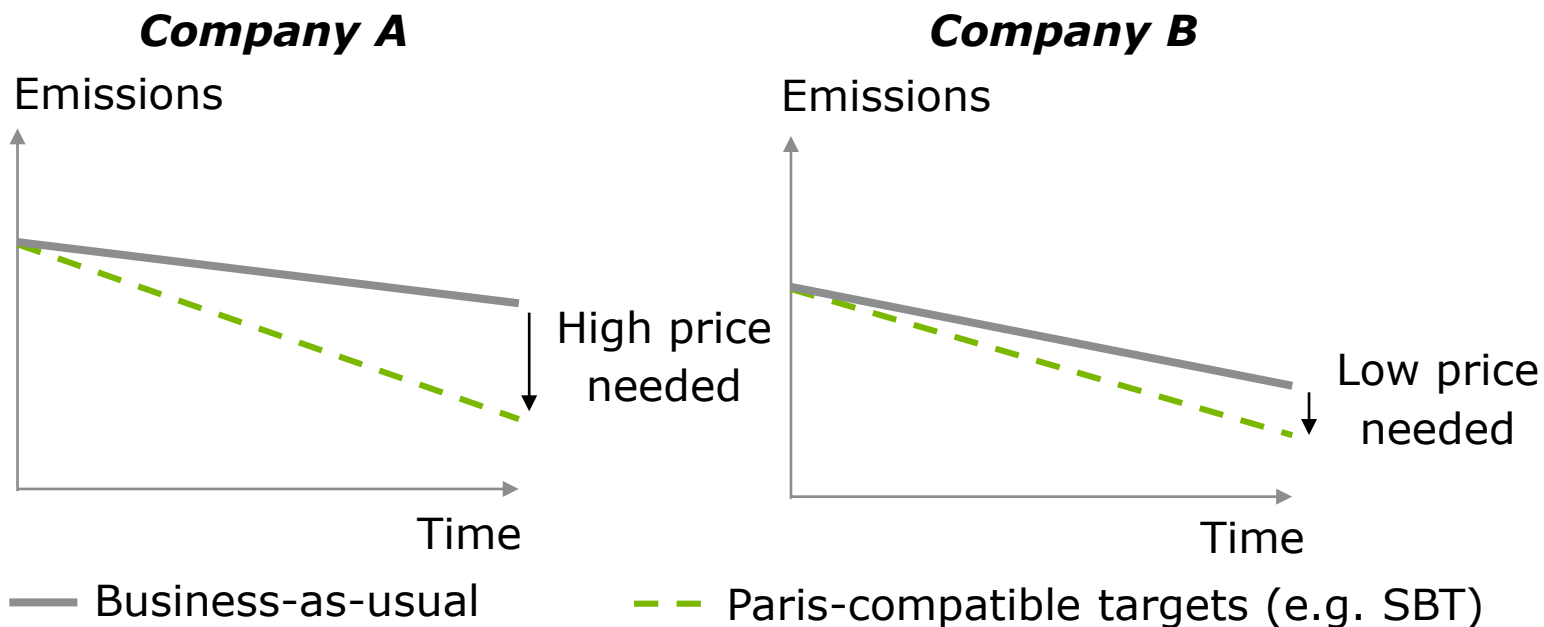
Abatement costs

- > Most companies use current or future compliance prices
- > Some companies use different prices depending on the business decision
- > Others use a combined approach with a minimum price under low compliance prices

Best practice approach: a carbon price that induces emission reductions in line with the Paris Agreement?

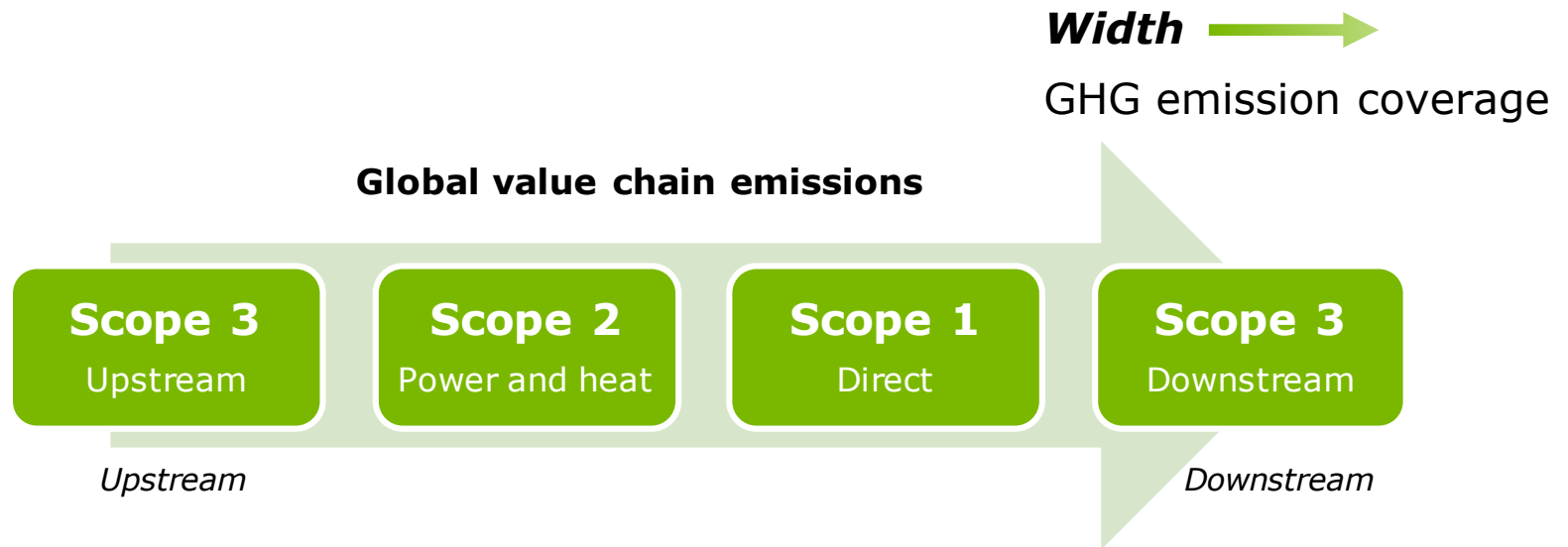
Best practice carbon price levels is different for each company and can change over time

↑ **Height**
Carbon price level



Note: this is a simplistic illustration. In practice many factors play a role in the internal carbon price level needed to achieve emission reductions in line with the Paris Agreement

Most companies focus on scope 1 and 2 emissions in their internal carbon pricing approach, much less on scope 3

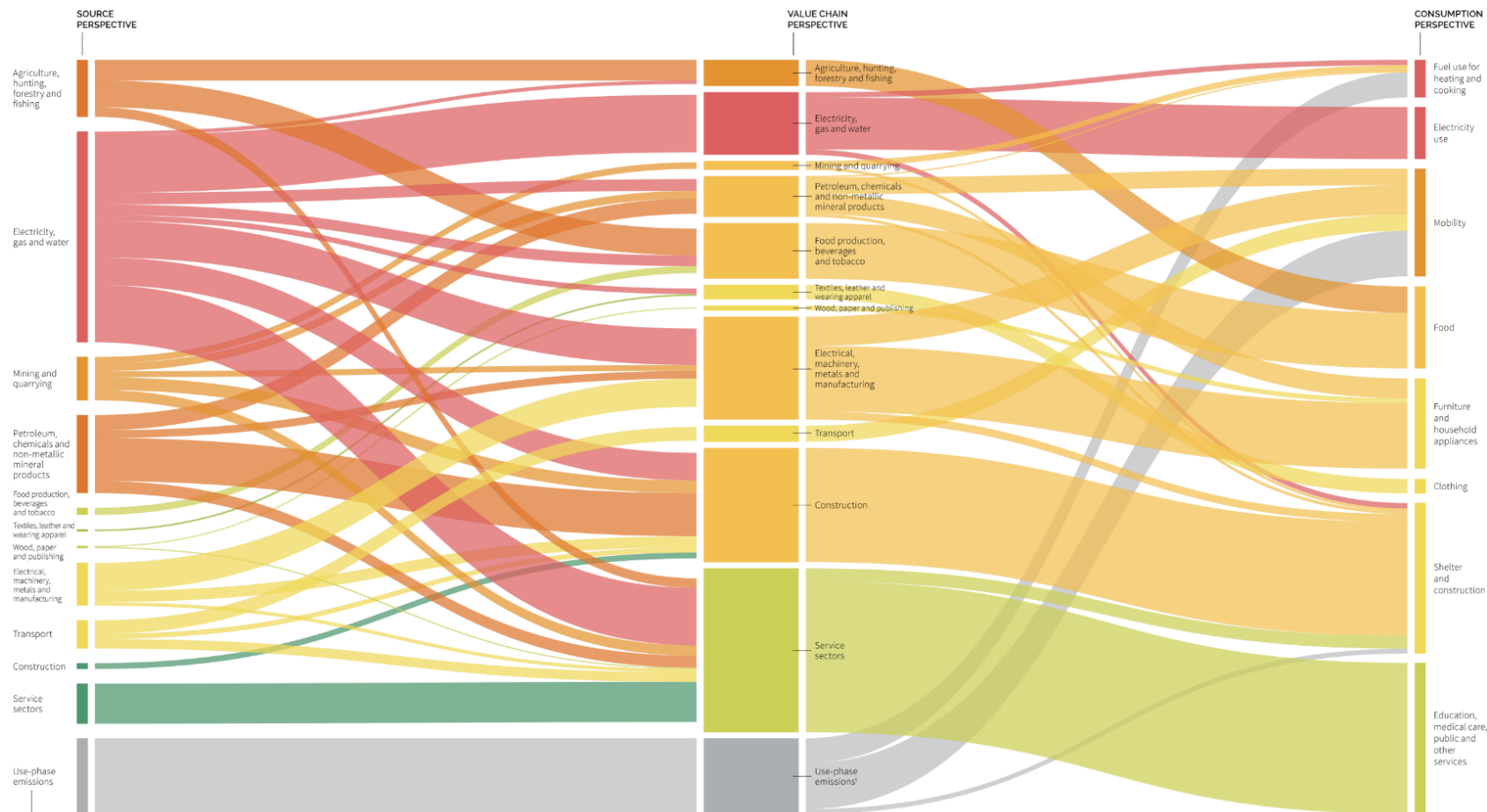


GHG emissions	Examples of relevant decisions
Scope 1	Investment and production decisions
Scope 2	Energy purchasing decisions
Scope 3 upstream	Material sourcing decisions
Scope 3 downstream	R&D decisions for future products

Note: Some companies only apply their internal carbon pricing approach to a limited scope, because other GHG emissions are covered under different climate initiatives

Best practice approach: needs to consider the whole value chain and focus on GHG emission hotspots?

Width →
GHG emission coverage



Source: Generation Foundation and Ecofys. 2016. *Impacts of a global carbon price on consumption and value creation – Implications for carbon pricing design*, London, United Kingdom.

Most companies use internal carbon pricing as a risk mitigation tool in investment and operational decisions

Two main approaches used



Depth

Business influence



Shadow price → widely used, influence varies



Internal fee → limited use, concrete influence

Different types of decisions to influence

- > Investment (CAPEX)
- > Operational (OPEX)
- > Procurement
- > Product
- > Strategic
- > Marketing
- > R&D planning
- > Remuneration of staff

Best practice approach: materially affect business decisions and have strong support from the board?

 **Depth**
Business influence

Strong influence



Passing criterion for business decisions
Generating funding for climate action

Embedded in overall costs calculations

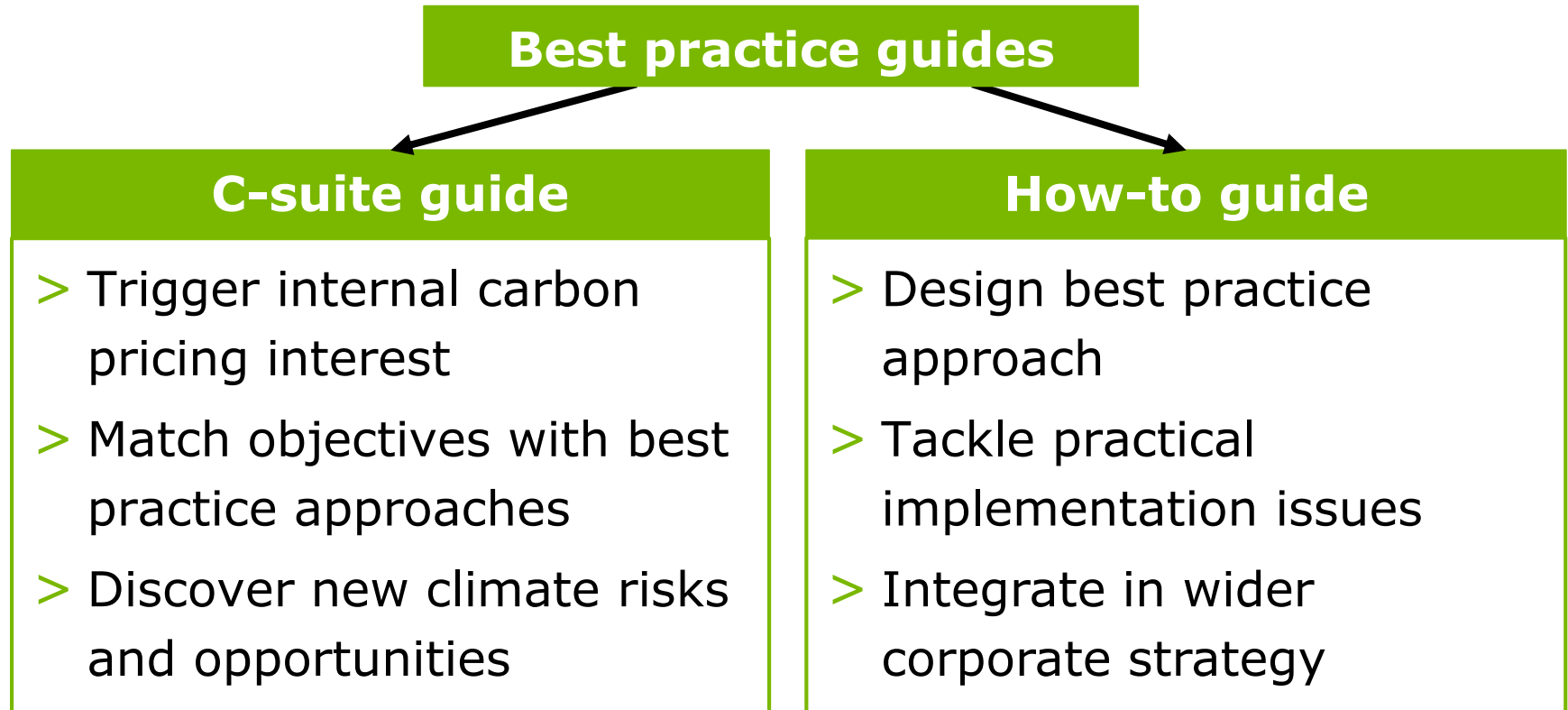
Semi-quantitative in non-binding scoring

Qualitative non-binding decision factor

Tracking compliance and policy advocacy

Weak influence

We are developing guides to enhance the uptake of best practice internal carbon pricing approaches



We would be interested in hearing from companies with best practice approaches, in particular from the food value chain



For **more information or interest participating in this study**,

please contact **Ecofys**:

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"Best practice approaches to internal carbon pricing" is a research topic under the Carbon Pricing Unlocked partnership



To receive **news and updates** about our partnership, please sign up at cpu@ecofys.com

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Global consulting company founded in 1984 with the **mission** to enable **sustainable energy for everyone** – since 2016, Ecofys is part of **Navigant's global Energy practice**



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Our strength lies in our strategic understanding of complex energy and climate transition issues: Ecofys **connects the dots** within the triangle between **governments, energy players, and (energy-intensive) end-users**

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