



2017 Accounting, boundaries and scopes

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<https://vimeo.com/207314067>

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Objectives

- ▼ What boundaries to consider
- ▼ What data to gather
- ▼ How to calculate emissions
- ▼ How to categorize and report them

Guidance



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ata and insights



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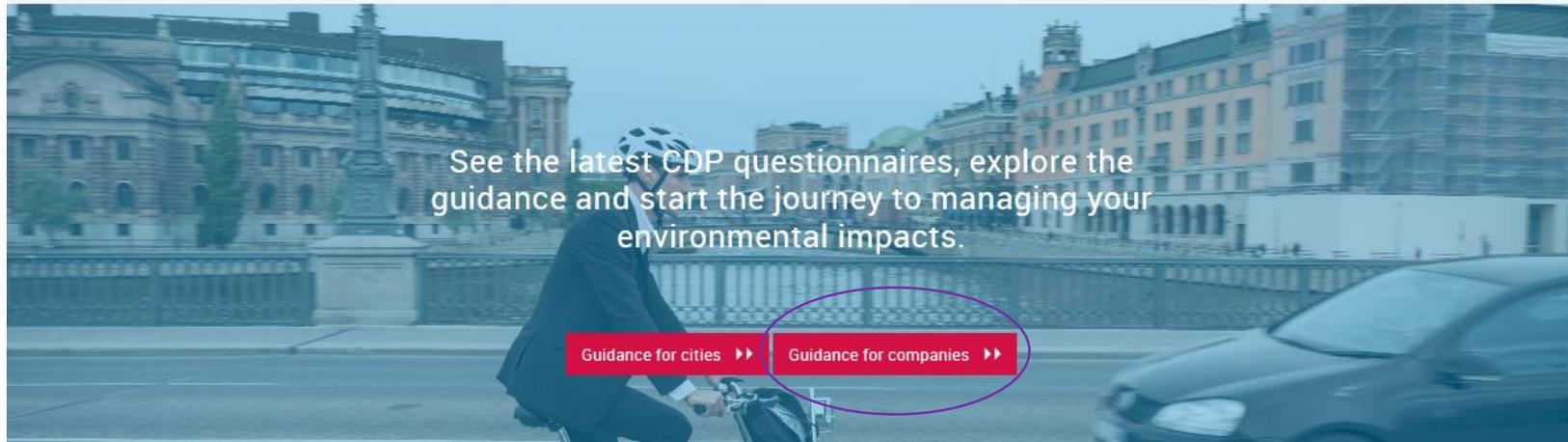
We understand that disclosing through CDP, whether for the first time or as an experienced responder, takes time and requires support. CDP offers this support on every step of the disclosing journey through guidance documentation, live webinars and workshops.

CDP's guidance documents provide an overview of question pathways as well as details on what information to provide. Once you have registered and activated your questionnaire we can guide you on the format required and where to find tools or further information to construct your answers.

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Emissions accounting

A variety of standards are available

▼ [The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard](#) by the WRI and WBCSD.

▼ Other recognized protocols for specific countries can be found in the guidance.

Calculation tools

- ▼ **Cross-sector tools** – stationary combustion, mobile combustion, etc.
- ▼ **Sector-specific tools** – cement, oil and gas, etc.
- ▼ Multiple calculation tools to cover all GHG emission sources.

Example: Aluminium Production Facility

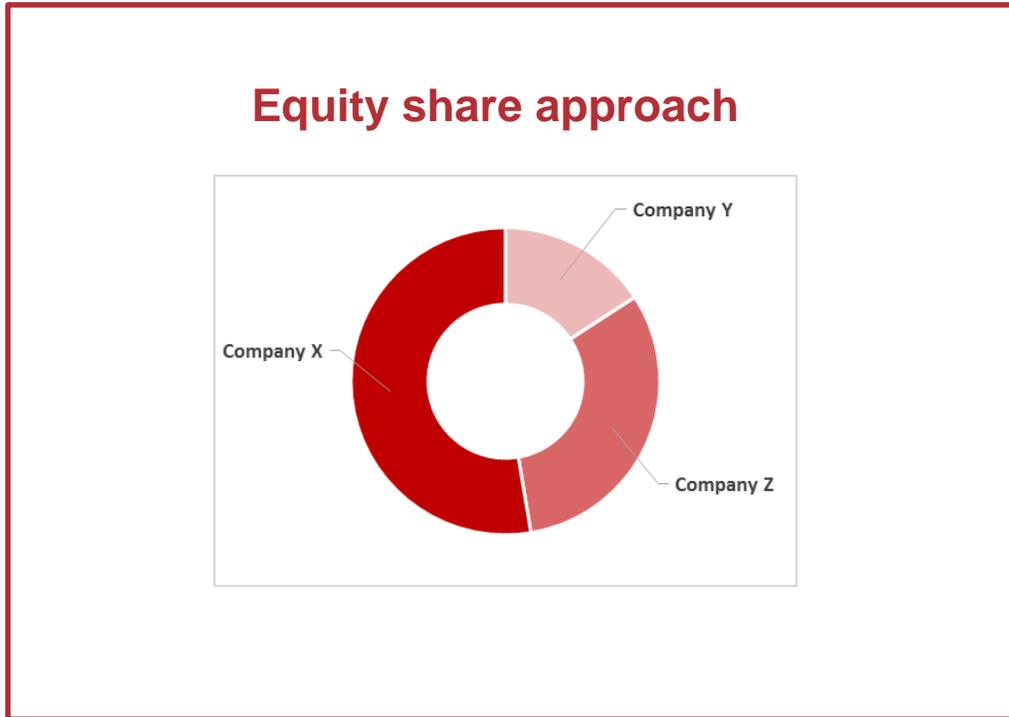
- ▼ Stationary combustion (for purchased electricity, on-site generation of energy, etc.)
- ▼ Mobile combustion (for transportation of materials by train, on-site vehicles, employee business travel, etc.)
- ▼ HFC use (for refrigeration, etc.)
- ▼ Aluminum production.

Reporting boundary/Consolidation approach

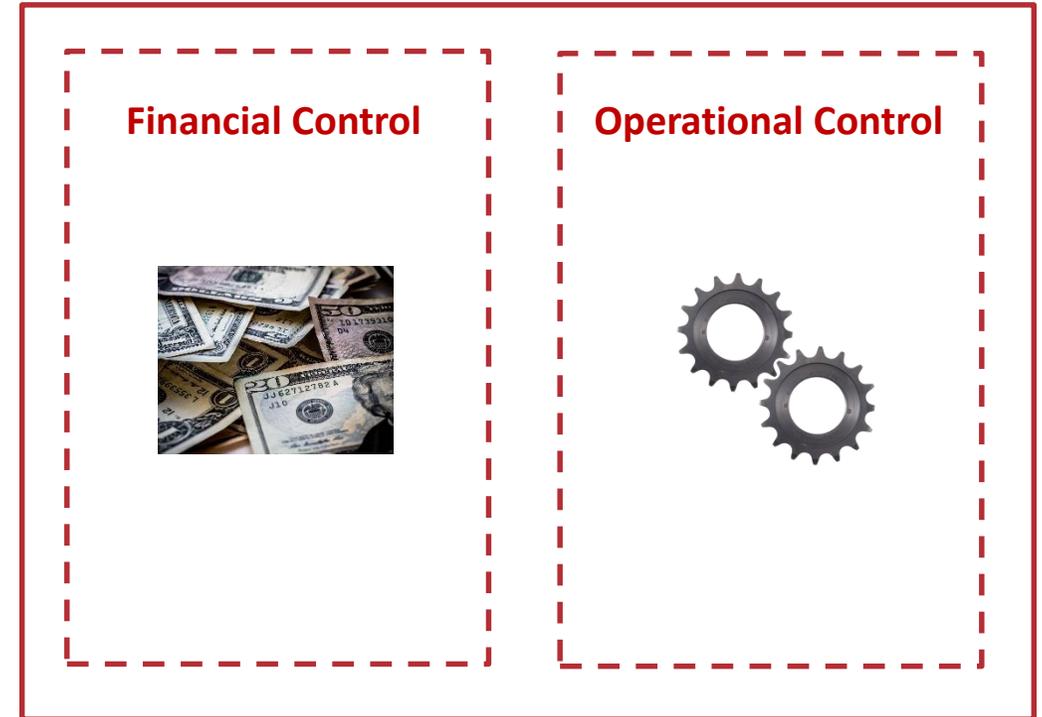
The reporting boundary represents the owned or controlled group, company, companies, businesses or organizations to which your response relates.

Reporting boundary

Reporting boundary



OR



To maintain consistency for all questions, all levels of the organization should follow the same consolidation policy.

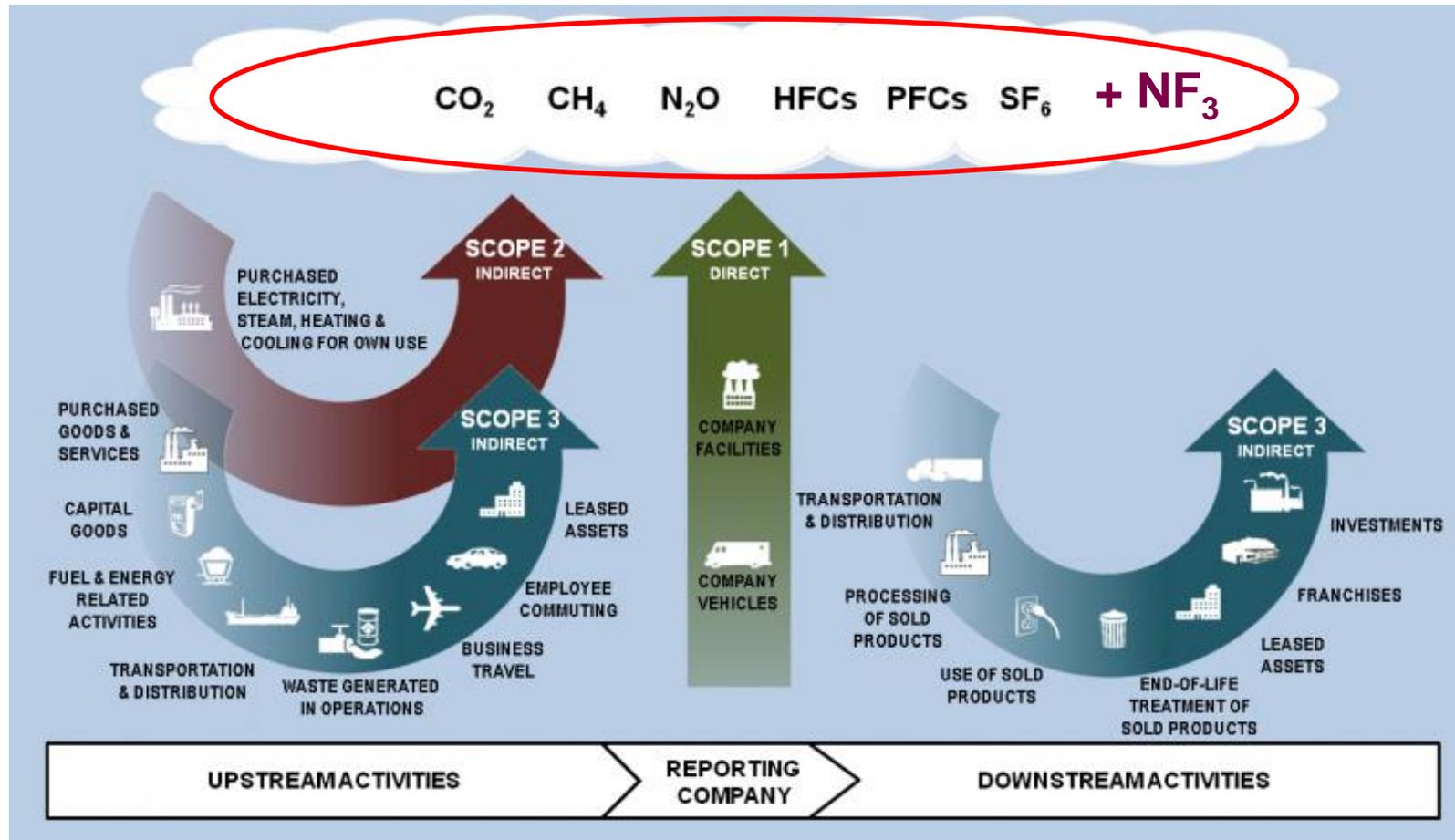
Boundaries

Accounting Category	Accounting for GHG emissions according the GHG Protocol Corporate Standard	
	Based on Equity Share	Based on Financial Control
Group companies/ subsidiaries	Equity share of GHG emissions	100% of GHG emissions
Associated/ affiliated companies	Equity share of GHG emissions	0% of emissions
Non-incorporated joint ventures/ partnerships/ operations where partners have joint financial control	Equity share of GHG emissions	Equity share of GHG emissions
Fixed asset investments	0%	0%
Franchises	Equity share of GHG emissions	100% of GHG emissions

Uncertainty and exclusions

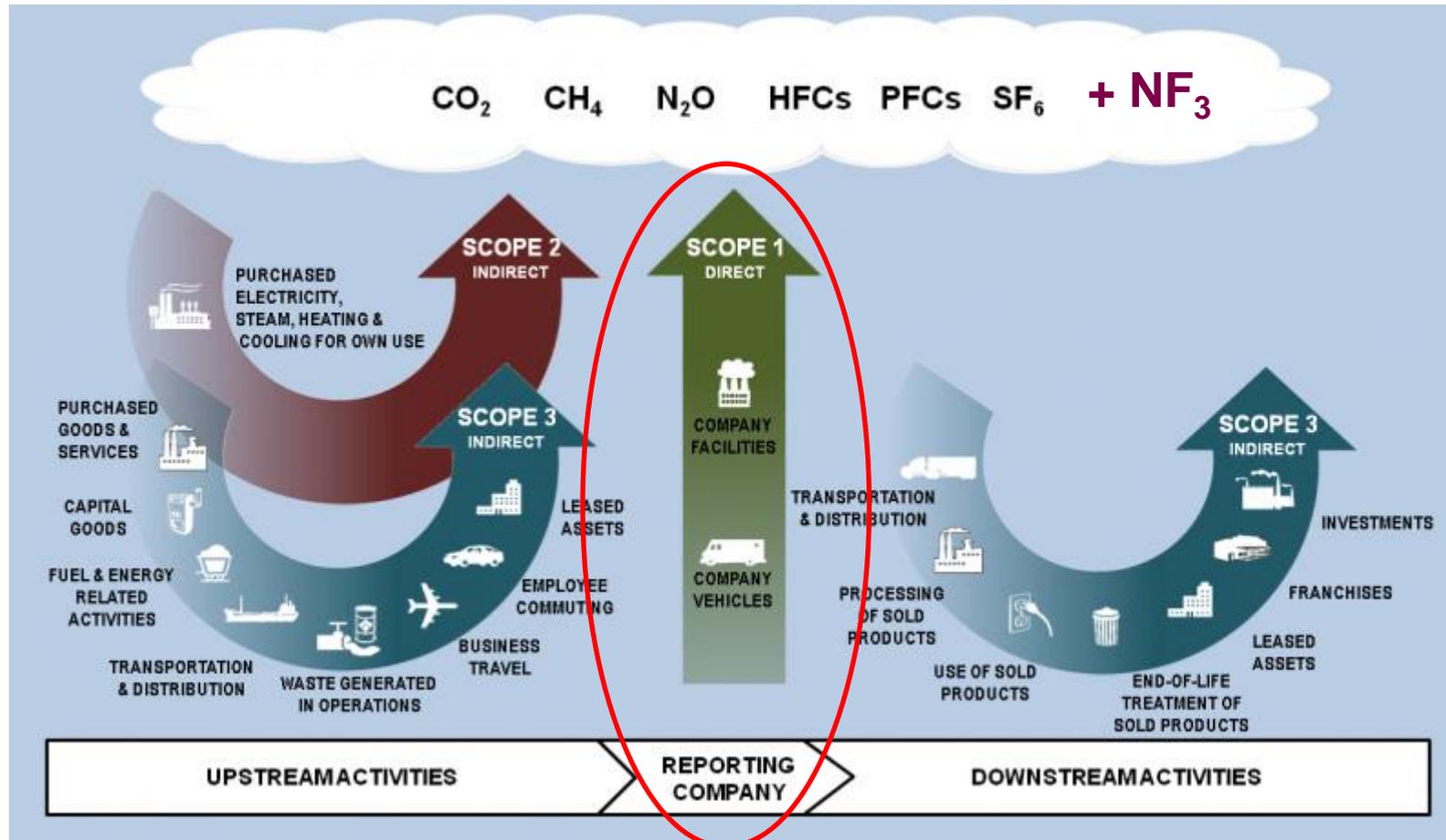
- ▼ Difficulty in gathering data
- ▼ Metering/measurement issues
- ▼ Data management constraints
- ▼ Incomplete information for the period
- ▼ Structural changes (mergers, acquisitions or divestments)
- ▼ Outsourcing and/or insourcing of activities
- ▼ Unreliable information

Reporting scopes



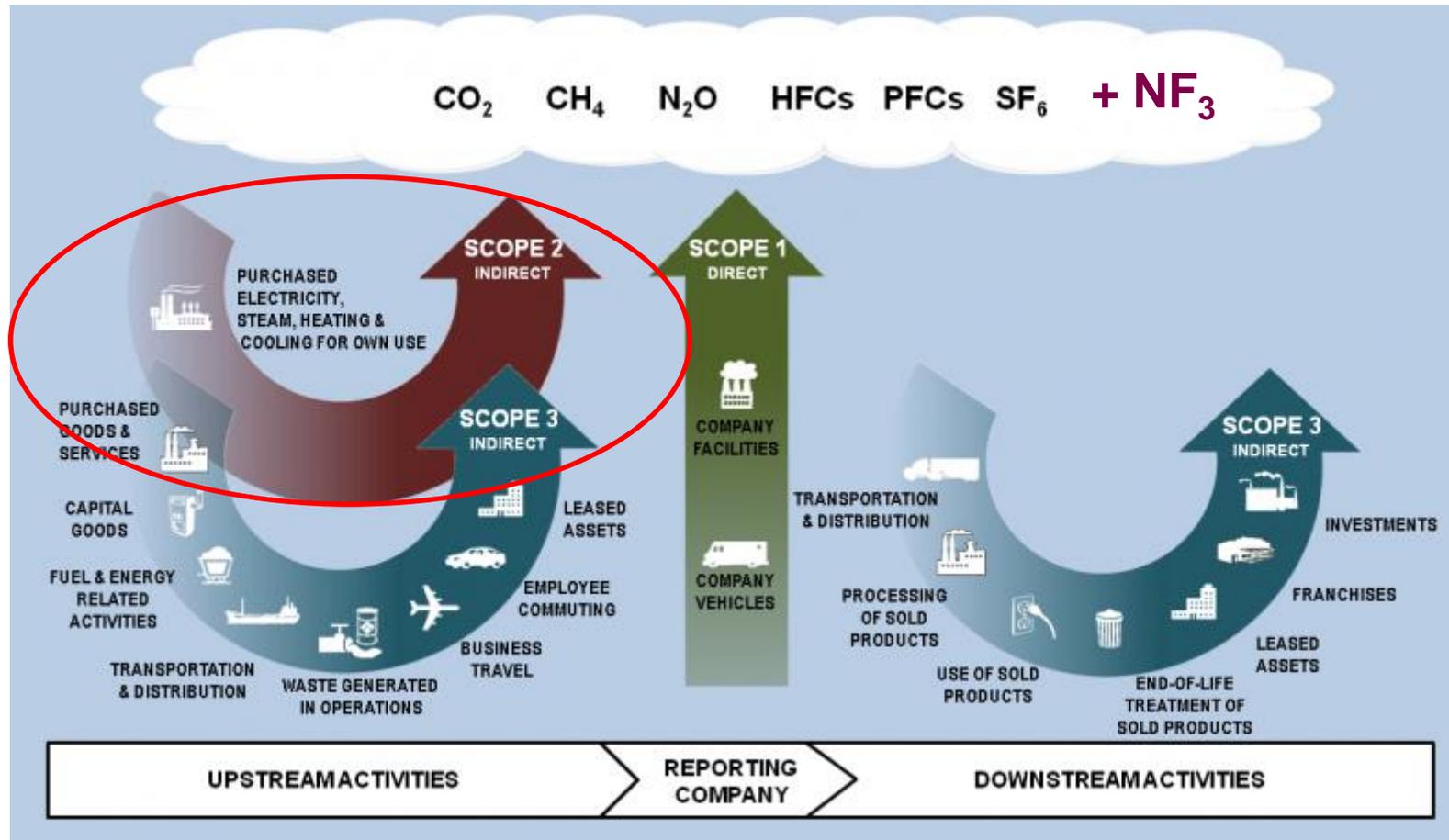
Source: World Resources Institute

Scope 1



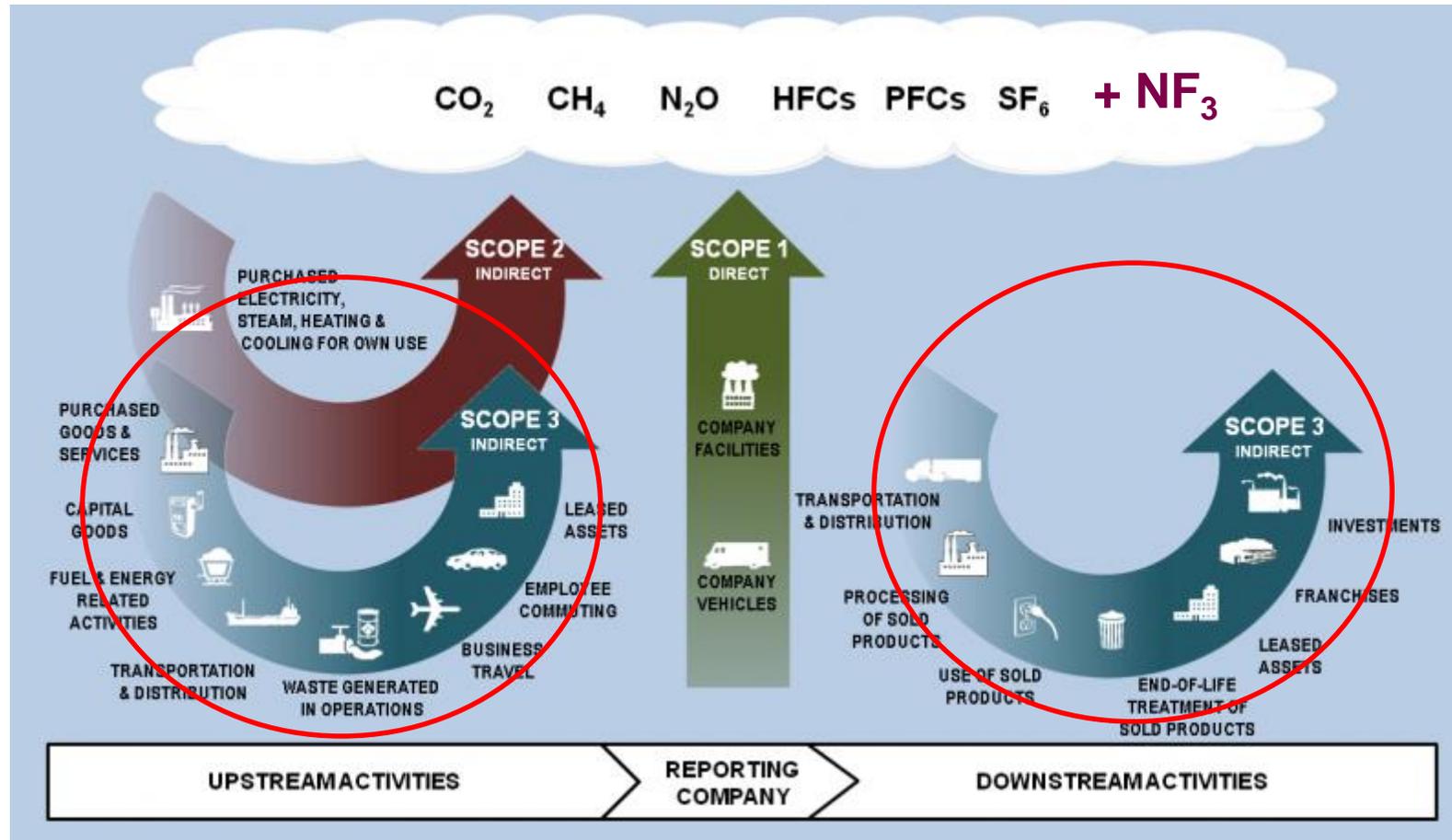
Source: World Resources Institute

Scope 2



Source: World Resources Institute

Scope 3



Source: World Resources Institute

Notes on emissions reporting

- ▼ The aim of the scopes is to minimize double counting by organizations or, where it cannot be avoided, make it identifiable.
- ▼ Report all emissions as metric tonnes of carbon dioxide equivalent (CO₂-e), based on accepted global warming potential (GWP) data.
- ▼ If you do not have enough data extrapolate out and report as a source of inaccuracy; or leave the question blank and explain why.

Scope 1 – Source of emissions

The TOTAL global direct emissions from sources owned or controlled by the reporting organization.

- ▼ **Stationary combustion:** boilers, furnaces, engines, etc.;
- ▼ **Mobile combustion:** automobiles, planes, ships, trains, etc.;
- ▼ **Process emissions:** cement manufacturing, aluminum smelting, etc.; and
- ▼ **Fugitive emissions:** equipment leaks, hydrofluorocarbon emissions from refrigeration, etc.

Scope 1 – What to report

Report your company's total emissions before any deductions or other adjustments.

You should NOT deduct the following from your total:

- ▼ GHG mitigation activities;
- ▼ Offset credits;
- ▼ Renewable energy certificates (RECs);
- ▼ Avoided emissions from the use of goods and services;
- ▼ Reductions attributable to the sequestration of GHGs; and
- ▼ Reductions attributable to the transfer of GHGs.

These actions can be documented in other areas of the CDP questionnaire.

Scope 1 – Calculations

- ▼ Collect records of purchased quantities of fuels and convert to MWh
- ▼ Use published emissions factors to calculate GHG emissions
- ▼ Use sector-specific tools for calculating process and fugitive emissions

<http://www.ghgprotocol.org/calculation-tools/all-tools>

Scope 2 – Sources of emissions

- ▼ Indirect GHG emissions that the company has caused through its consumption of energy in the form of electricity, heat, cooling or steam.
- ▼ Use the grid average emission factor, except in the specific circumstances detailed in the questionnaire.

If your company purchases electricity via a “green” tariff to support zero or low carbon electricity generation, report this separately

Scope 2 – Calculations

- ▼ Collect records of metered energy consumption and convert to MWh
- ▼ Use supplier-specific, local grid or other published emissions factors to calculate resulting GHG emissions.

<http://www.ghgprotocol.org/calculation-tools/all-tools>

Scope 3 – Sources of emissions

▼ Indirect emissions that arise as a consequence of an organization's activities from sources that are owned or controlled by others.

Upstream scope 3 emissions	Downstream scope 3 emissions
1. Purchased goods and services	9. Downstream transportation and distribution
2. Capital goods	10. Processing of sold products
3. Fuel- and energy-related activities (not included in scope 1 or 2)	11. Use of sold products
4. Upstream transportation and distribution	12. End-of-life treatment of sold products
5. Waste generated in operations	13. Downstream leased assets
6. Business travel	14. Franchises
7. Employee commuting	15. Investments
8. Upstream leased assets	

Scope 3 – What to report

Please consider:

- ▼ Scale
- ▼ Importance to your business
- ▼ Stakeholders
- ▼ Potential for reductions
- ▼ Contractual agreements

Scope 3 – Extra guidance

- ▼ Corporate Value Chain (Scope 3) Accounting and Reporting Standard from WRI and WBCSD: <http://www.ghgprotocol.org/standards/scope-3-standard>
- ▼ [Scope 3 calculation guidance](#)
- ▼ [Sample Scope 3 GHG Inventory Reporting Template](#)
- ▼ [Factsheet and FAQs](#)

Scope 3 – Calculations

- ▼ Collect records of activity data based on chosen areas of focus
- ▼ Use published or third-party emissions factors to calculate GHG emissions.

<http://www.ghgprotocol.org/calculation-tools/all-tools>



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