



An Introduction to Organisational Carbon Footprints

Jon Burrow
Head of Carbon Accounting

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Introduction

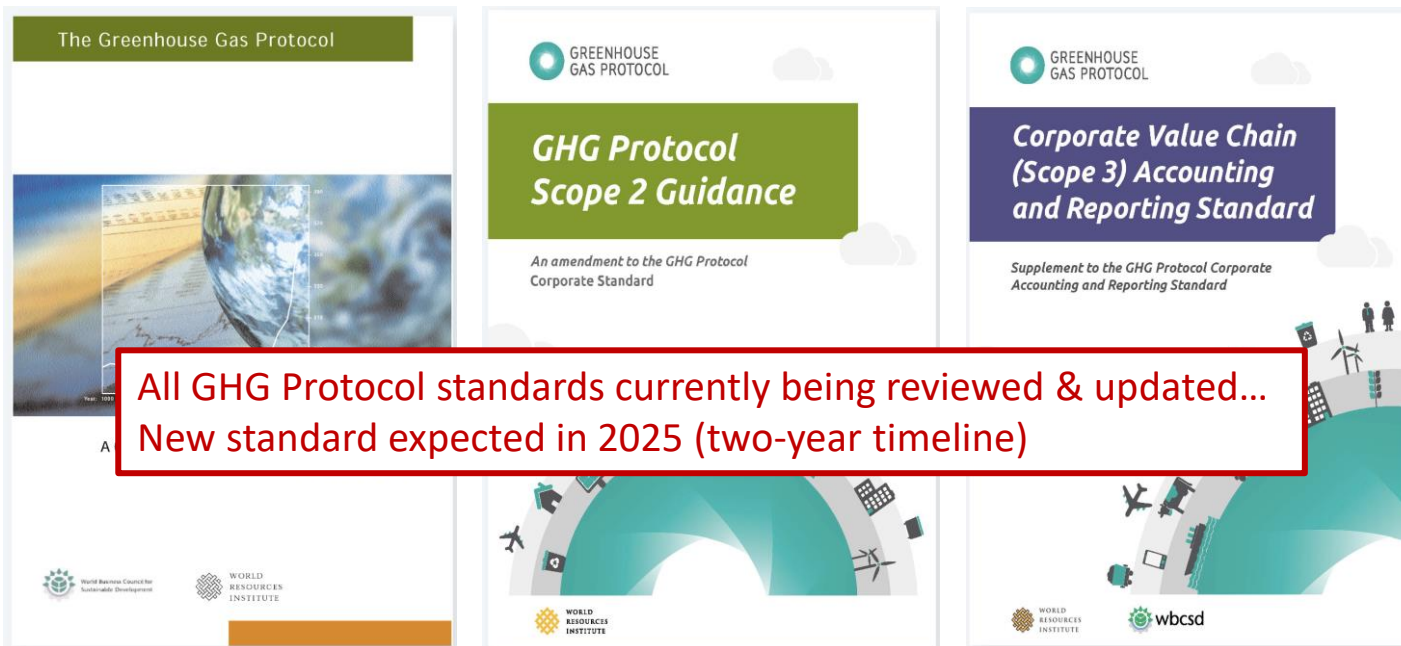
- Environmental consultants, founded in 2013
- Offer a range carbon / resource efficiency services:
 - Organisational, product, building carbon footprints
 - Water footprints
 - Life cycle assessments (LCA)
 - Circular economy
 - Resource efficiency, carbon consultancy, peer reviews
 - Online training courses
 - Carbon offsetting and tree planting
- Hosts the Inventory of Carbon & Energy (ICE) database
 - Free embodied carbon database for materials
 - Downloaded by over 30,000 professionals across the globe

Organisational Carbon Footprints

- Marketing / brand differentiation
 - Stakeholder requests
 - Customer expectations
 - Investment decisions
- Internal product innovation / development / hotspots
- Regulatory compliance (e.g., SECR, ESOS, UK Gov PPN...)
- Likely more requirements to come... e.g. Net Zero Transition, Carbon Tax...?

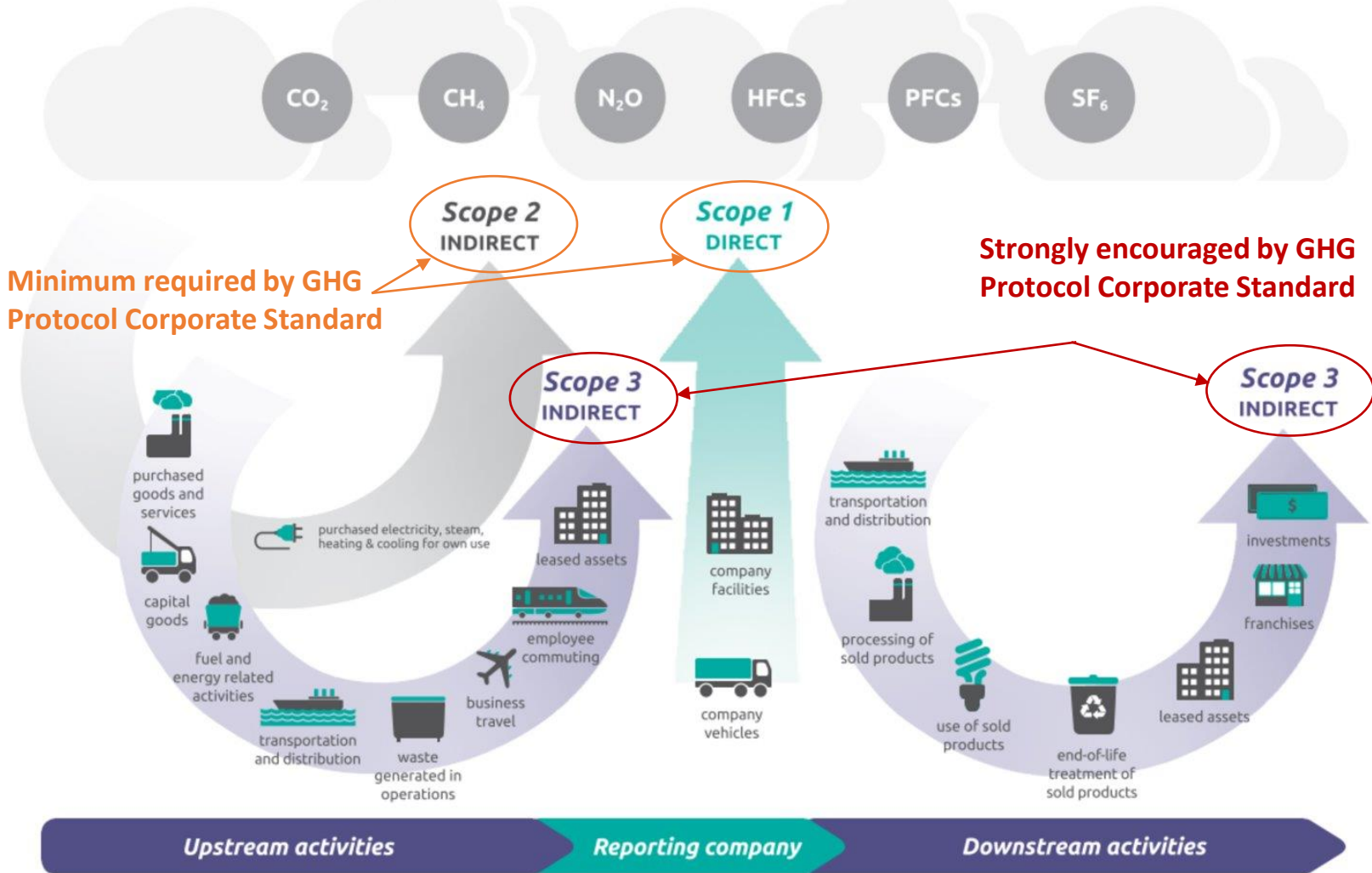
Reporting Standards

- GHG Protocol Corporate Standard (Revised Edition, 2015 amendment)
- GHG Protocol Scope 2 Guidance (2015)
- GHG Protocol Corporate Value Chain (Scope 3) Standard (2011)



Source: GHG Protocol

Boundaries – What should you include?



Source: GHG Protocol

Start with Scope 1&2

- **Document the process:**
 - Reporting period - annually, typically calendar or financial year
 - Organisational / operational scope & boundaries
 - Data collection & validation process
- **Access to the right data is key!**
 - Primary data e.g.,
 - Supplier invoices (elect / gas / other site fuel delivery statements)
 - Meter readings
 - Fleet fuel records (fuel cards / mileage logs)
 - Emission factors to convert activity data to Carbon e.g., UK Defra, IEA, energy suppliers...
 - Intensity metrics, e.g.,
 - Turnover
 - No' employees
 - Floor area
 - Production volumes

Scope 1&2 Reporting Tools

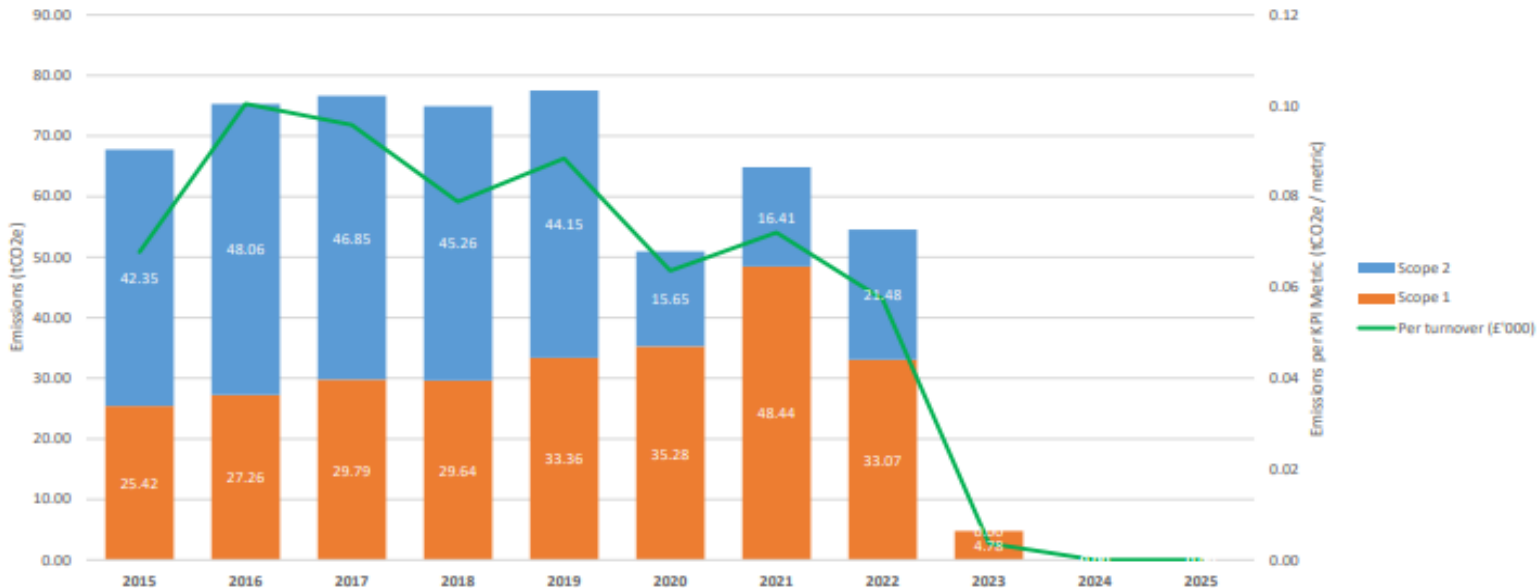
Carbon Footprint Comparisons:

Benchmark Year: 2016
 Reporting Comparison Year: 2021
 Dual Reporting Status: Both Location & Market Based

Carbon Footprint Metric	2016	2021	% Change
Absolute tCO2e	75.31	64.86	-13.88%
tCO2e per turnover	0.10	0.07	-28.24%
tCO2e per employee	3.14	1.97	-37.37%
tCO2e per tonne	0.11	0.08	-23.72%

Verification of footprint results is recommended to ensure completeness, accuracy and transparency of results

KPI Tracking (tCO2e / metric): Turnover



Source: Circular Ecology Scope 1&2 Reporting Tool - <https://circularecology.com/newsletter.html>

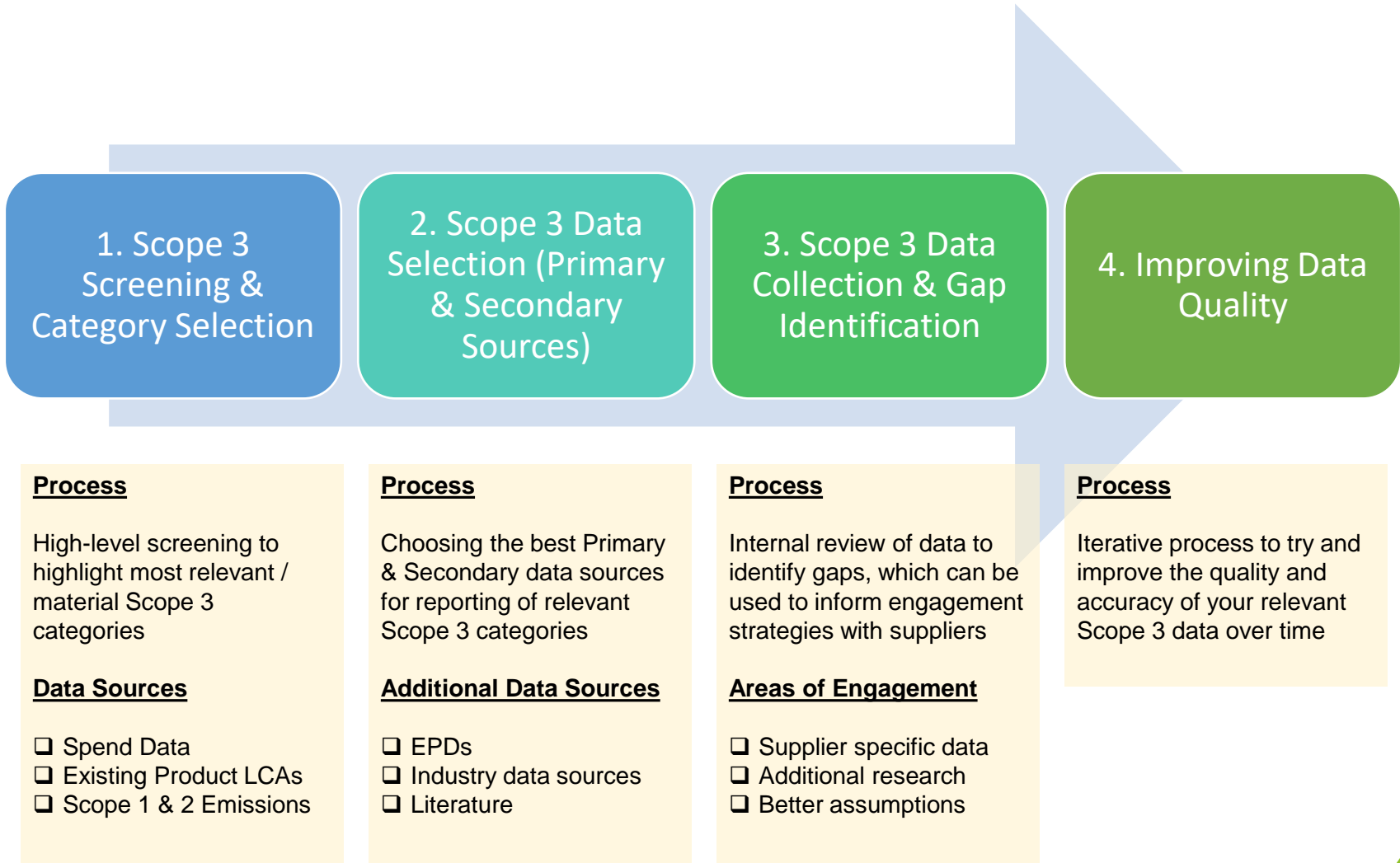


Explained – “Duel Reporting”

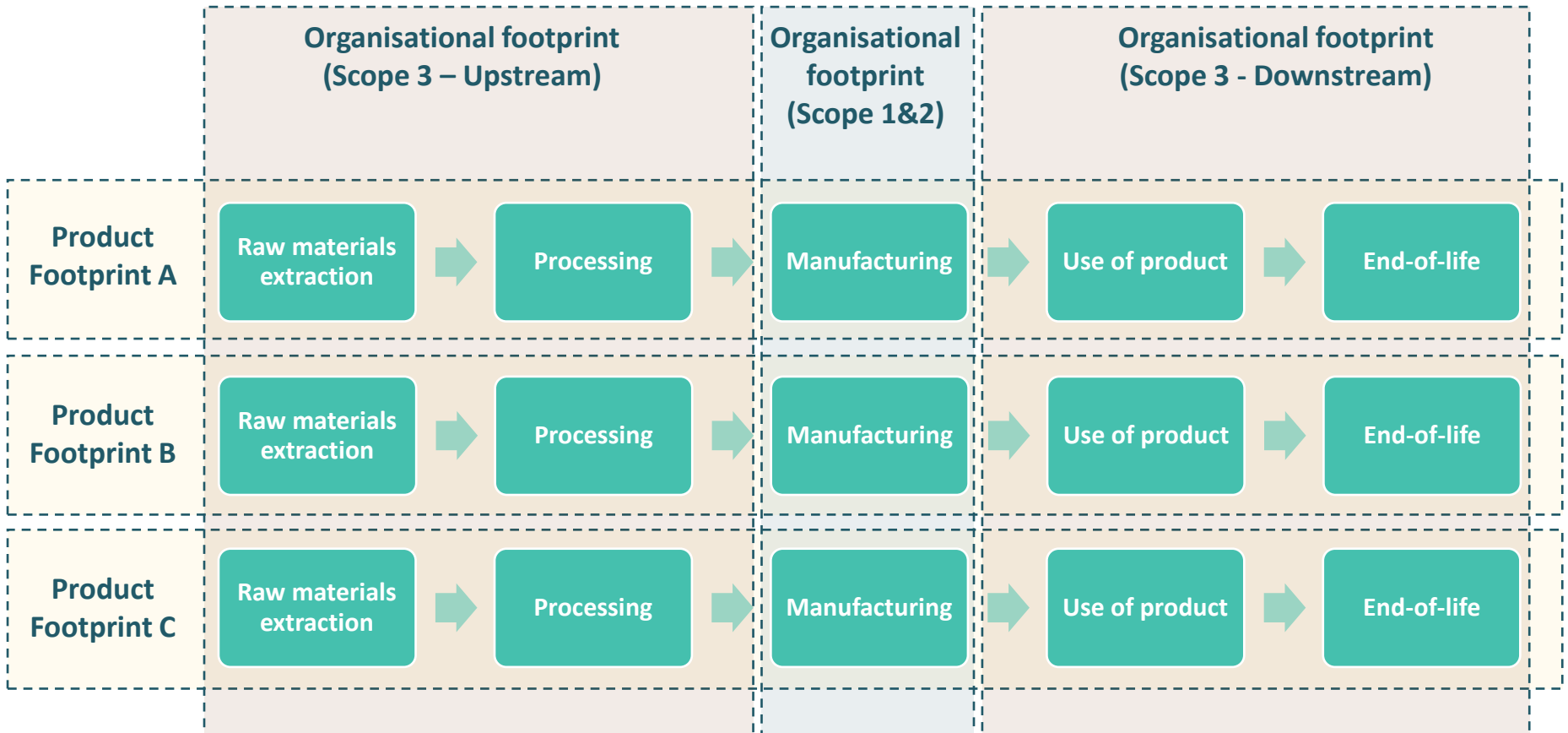
Reporting of both “**Location-based**” & “**Market-based**” Scope 2 emissions:

- **Location-based accounting method:**
 - Average emissions intensity of grids where energy consumption occurs
 - Country/region specific grid-average emission factor data
 - E.g., IEA national factors, UK DEFRA factors
- **Market-based accounting method:**
 - Emissions related to electricity that organisations have purposefully chosen or have been allocated by its supplier
 - Based on contractual arrangements (supplier specific)
 - E.g., electricity supply with 100% renewable contract backed by EACs (Energy Attribute Certificates), REGOs / GOs (Guarantees of Origin)

Suggested approach to Scope 3

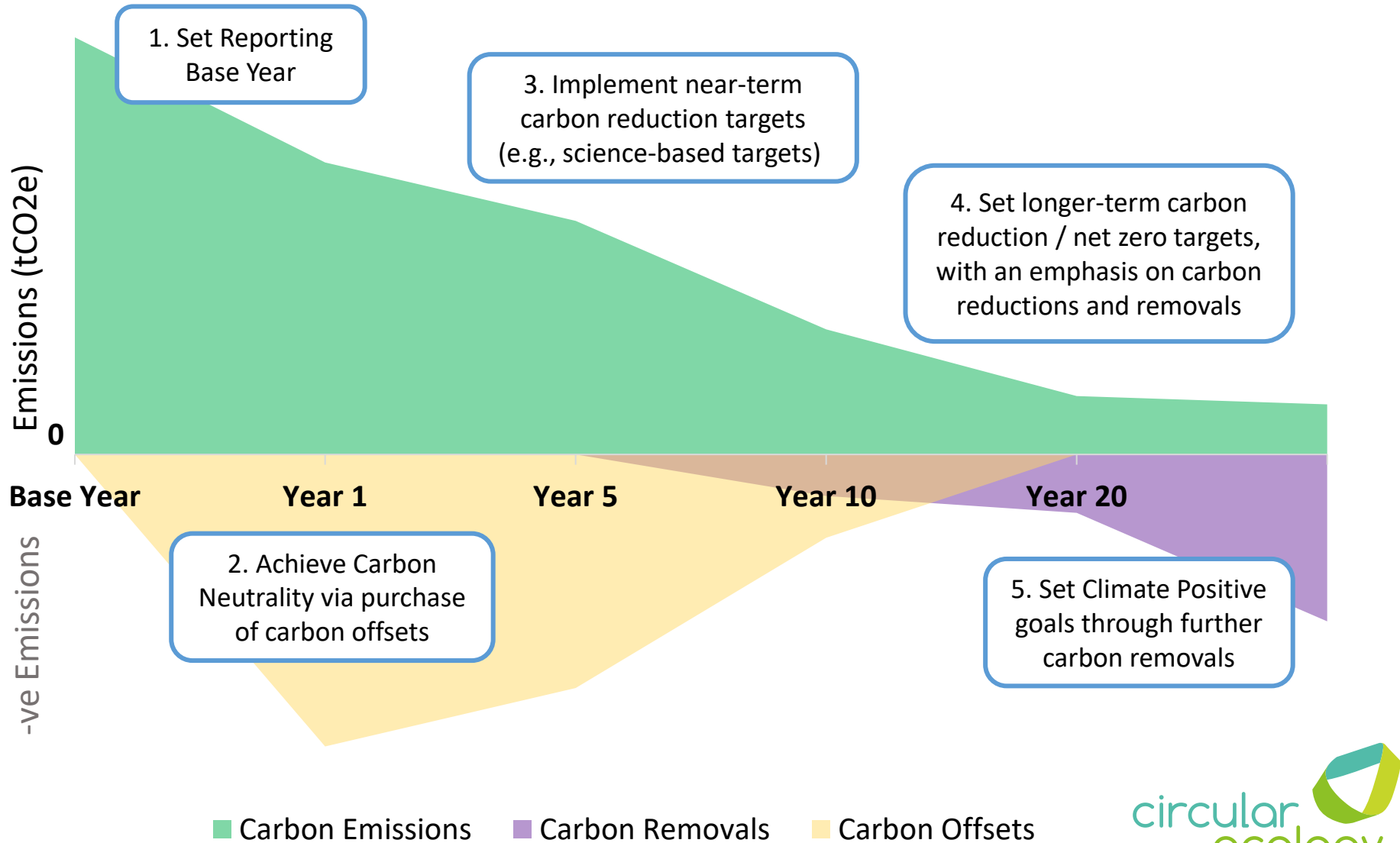


Organisation vs. Product Footprint



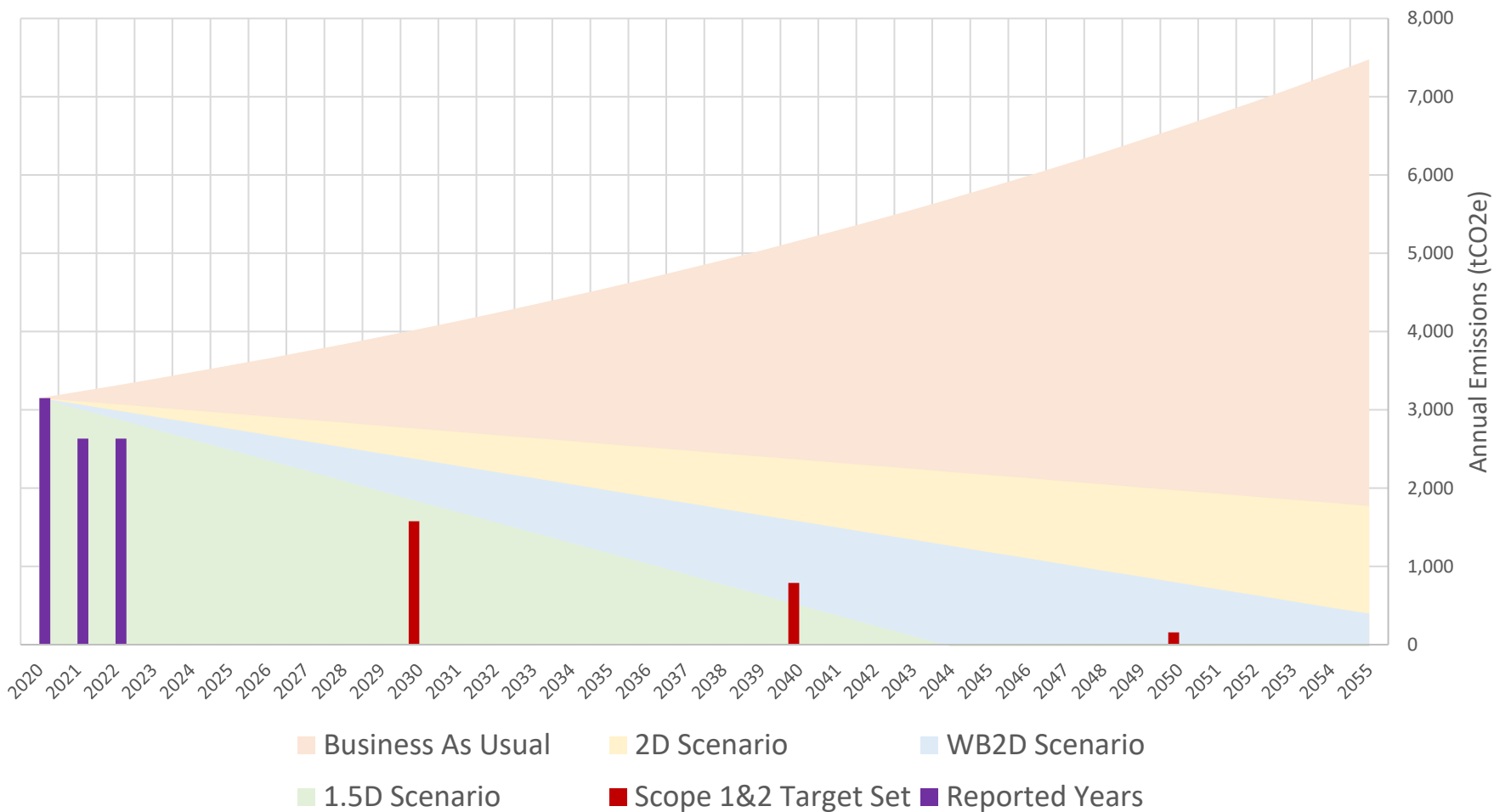
➡ = Transport

Carbon Reduction Target Types



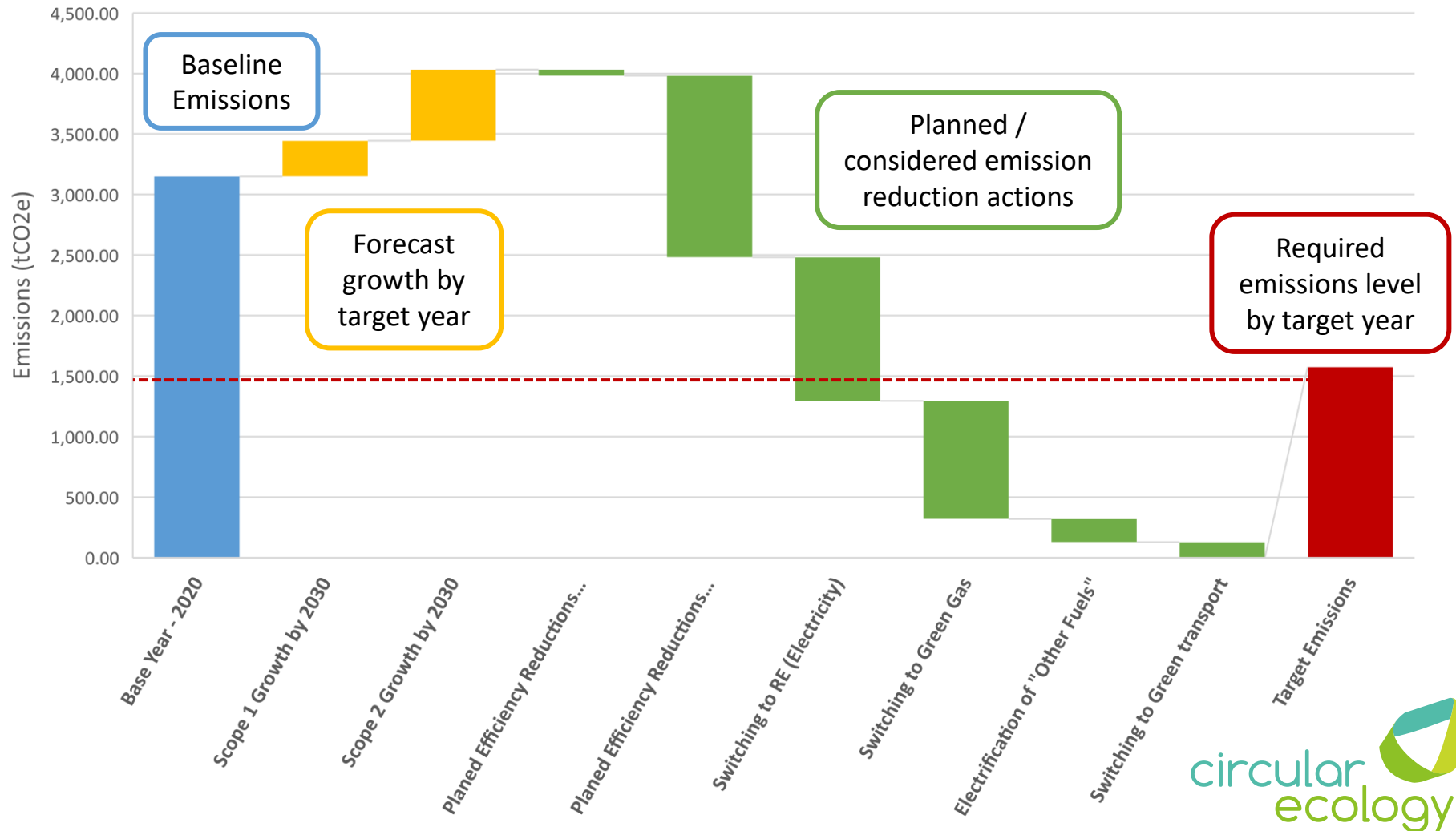
Carbon Reduction Targets

Carbon Forecasting assessed against the latest "Climate Science" to provide appropriate "near/medium/long-term" targets



Carbon Reduction Plan

Includes footprint reporting + reduction targets + carbon reduction actions



Carbon Offsets

Represents **1 tCO₂ removed or avoided**, achieved through projects such as -

- Reforestation, e.g., planting new trees
- Avoided deforestation, REDD (Reducing Emissions from Deforestation and Forest Degradation)
- Enhancement and sustainable management of forestry, REDD+
- Renewables, such as solar PV and wind turbines
- Capture of landfill gas or methane
- Clean cookstove projects
- Clean water access

<https://circularecology.com/carbon-offset-projects.html>

Carbon Offsets

Criteria to consider for credibility (high-quality offsets) –

- Additional** – ensuring that the carbon reduction is real and permanent
- Verified** – proving assurance on the quality and credibility of the credits
- Traceable** – transparent and proving proof of the offset

Other aspects you can consider...

- Relevance** to your organisation and alignment with other ESG goals

Summary

1. **Scope 1&2** – start with annual reporting and aim towards a “carbon reduction plan” i.e., baseline, annual reporting, reduction targets, and a list of reduction actions
2. Document all your processes, assumptions, and gaps for consistency and transparency
3. **Scope 3** - Perform an initial "Scope 3 Screening" (e.g., using spend data) before trying to calculate all scope 3 upstream & downstream emissions
4. Focus first on what data you have available already, then look at improving data quality for the next year (e.g., via supplier engagement / additional research)
5. Set multiple targets, and stagger these over time e.g., near-term, medium-term, long-term etc.
6. Quantify reduction opportunities, and plan for what is possible with available resources
7. Engage early as others will likely be trying to achieve the same thing



Thank you