



**BUREAU
VERITAS**

HOW TO ACHIEVE CLIMATE MITIGATION

2024

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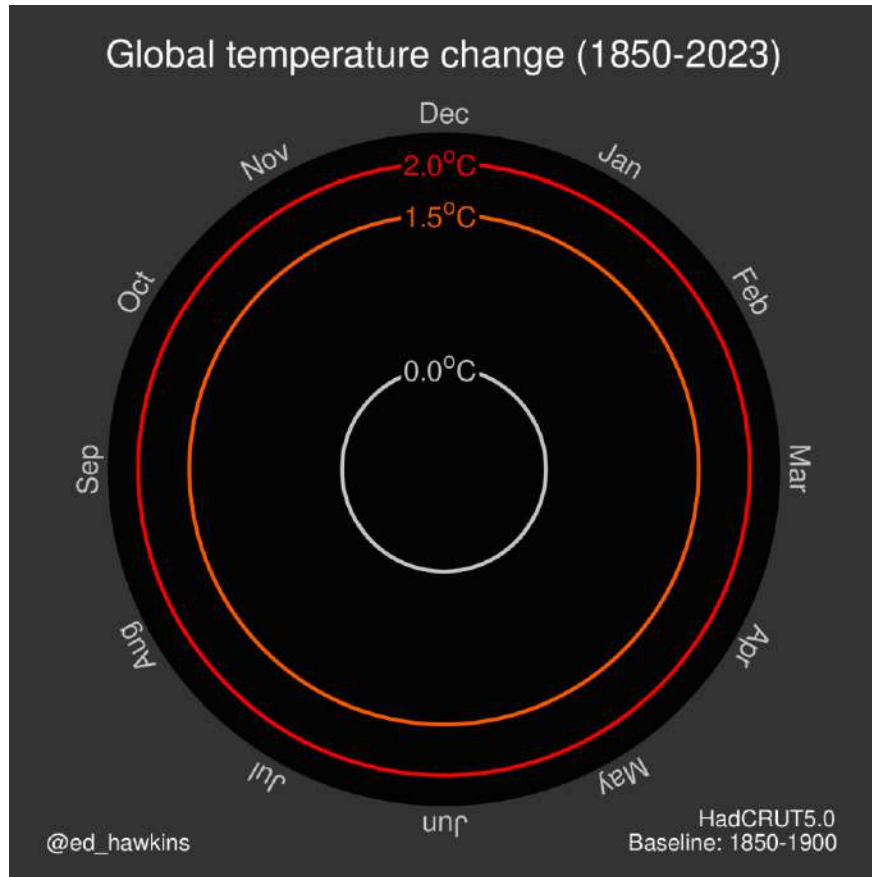
AS SEEN IN



TAKE CAREFUL STEPS



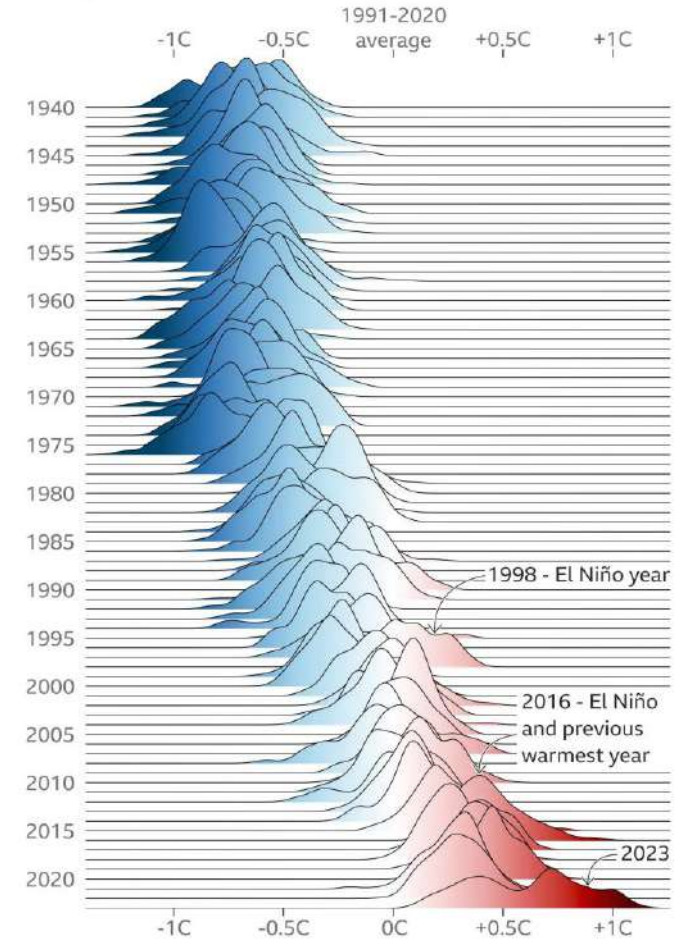
(REVERSE) WINTER IS COMING



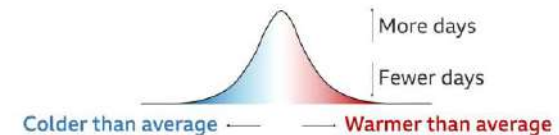
Prof. Ed Hawkins

More days at the highest temperatures in 2023

Daily global air temperature compared with the 1991-2020 average, by year



Each ridge in the chart shows every day in a year and how their temperatures compare with the 1991-2020 average



Source: ERA5, C3S/ECMWF

B B C

WHEEL OF SUSTAINABLE PRACTICE



1. ASSESS

Understand where you are in the journey.

Typical Services: Benchmarking, gap analysis, carbon footprint assessment, environmental reviews, environmental due diligence.

2. DEFINE

Establish where you want to go and set goals.

Typical Services: Materiality Assessment, stakeholder engagement, support in setting objectives, targets and KPI's.

3. PLAN

Work out how you will get there.

Typical Services: Strategy development, Systems development and Environmental Management Systems.

4. IMPLEMENT

Putting the plan into action.

Typical Services: Sustainability, carbon and environmental services, capacity building workshop, stakeholder engagement, legal registers.

5. MEASURE

Evaluate performance in line with sustainability KPIs.

Typical Services: Carbon foot printing, verification, auditing, pollution risk assessments, Clarity, Evaluate legal compliance / legal compliance audits.

6. COMMUNICATE

Share your progress and performance credibly with stakeholders.

Typical Services: Sustainability / carbon reporting, assurance, certification, auditing.

THE 3 STEPS

OF ORGANISATIONAL CLIMATE MITIGATION

MEASURE

GHG by
carbon accounting

- Carbon footprint for organisation
- Carbon footprint for product

REDUCE

GHG EMISSIONs
through meaningful
mitigations

- Climate action strategies
- Material topic

OFFSET

neutralising emissions
permanently

- Carbon credits

MEASURE

STANDARDS

FOR ACCOUNTING GHG EMISSIONS

| ISO



| GHG
PROTOCOL



GREENHOUSE
GAS PROTOCOL

| TGO



THE 2 METHODS

3-Scope



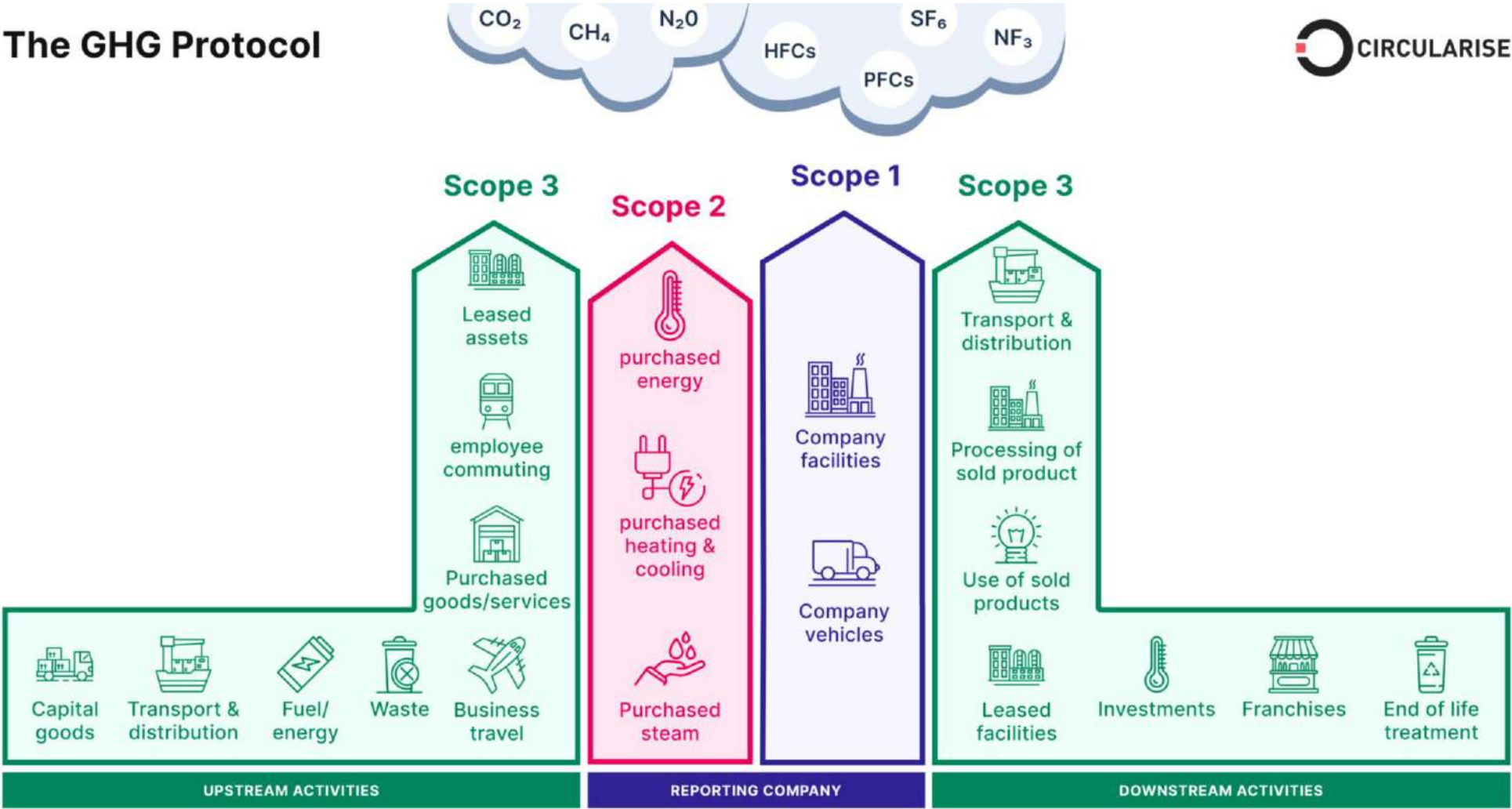
GREENHOUSE
GAS PROTOCOL



6-Category



The GHG Protocol



Scope 2 (indirect emissions from purchased energy)

Scope 3 (other indirect emissions)

Category 4: Upstream transportation and distribution

Category 6: Business travel

Category 7: Employee commuting

Category 9: Downstream transportation and distribution

Category 1: Purchased goods and services

Category 2: Capital goods

Category 3: Fuel and energy related activities

Category 5: Waste generated in operations

Category 8: Upstream leased assets

Category 10: Processing of sold products

Category 11: Use of sold products

Category 12: End-of-life treatment of sold products

Category 13: Downstream leased assets

Category 14: Franchises

Category 15: Investments

Category 1: Direct GHG emissions and removals

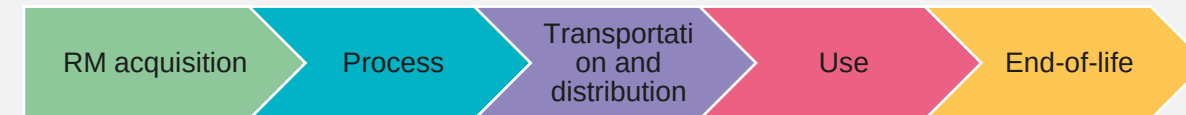
Category 2: Indirect GHG emissions from purchased energy

Category 3: Indirect GHG emissions from transportation

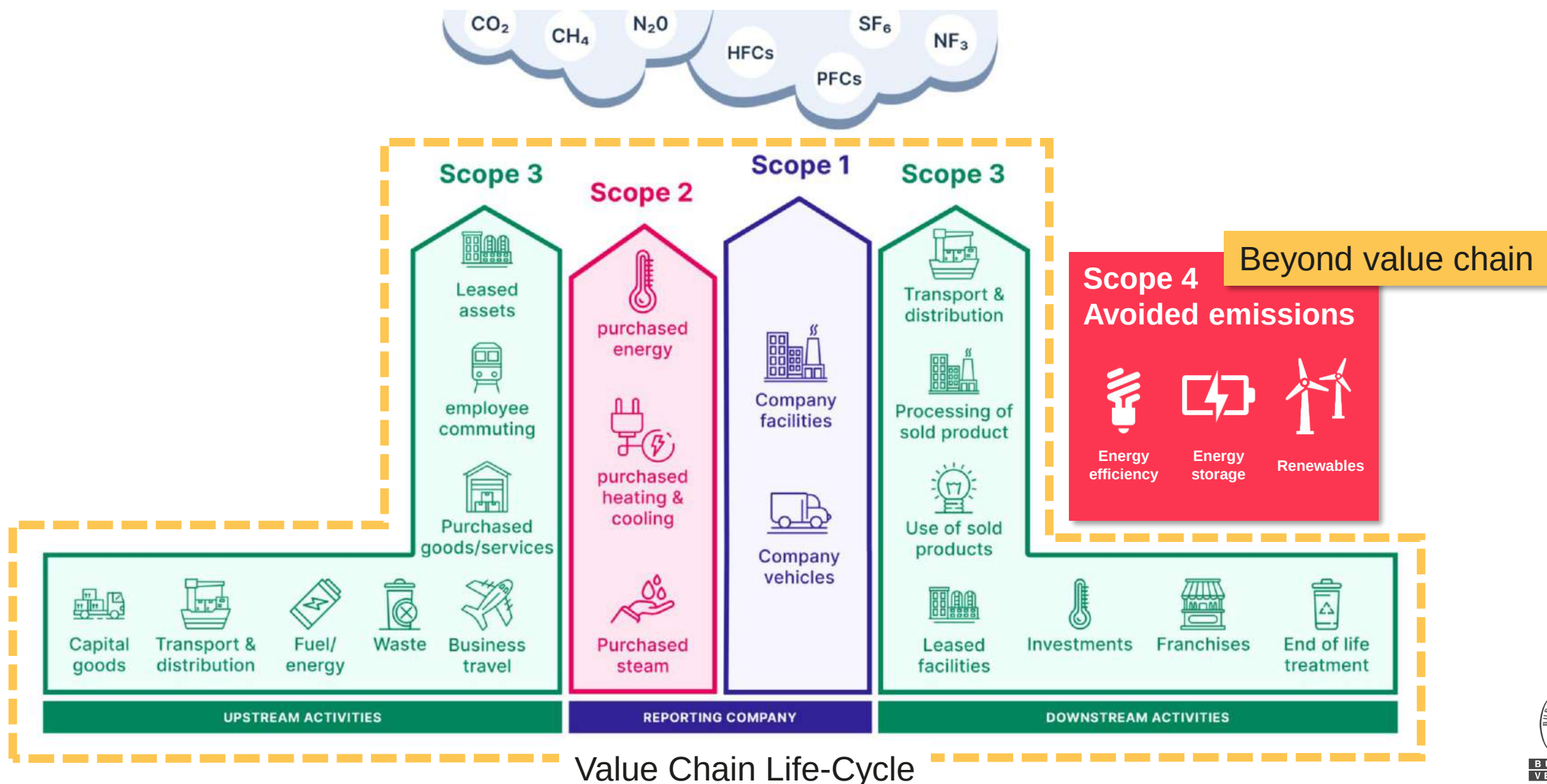
Category 4: Indirect GHG emissions from the use of products by the organization

Category 5: Indirect GHG emissions associated with the organization's use of products

Category 6: Indirect GHG emissions from other sources

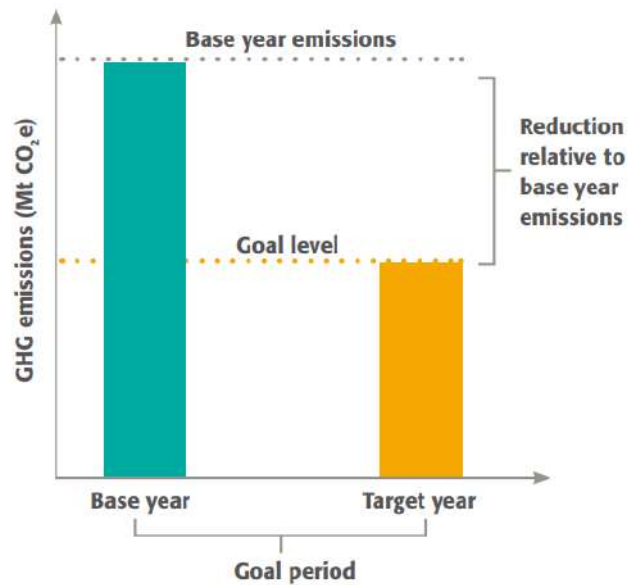


INDIRECT GREENHOUSE GAS EMISSIONS FROM OTHER SOURCES?!

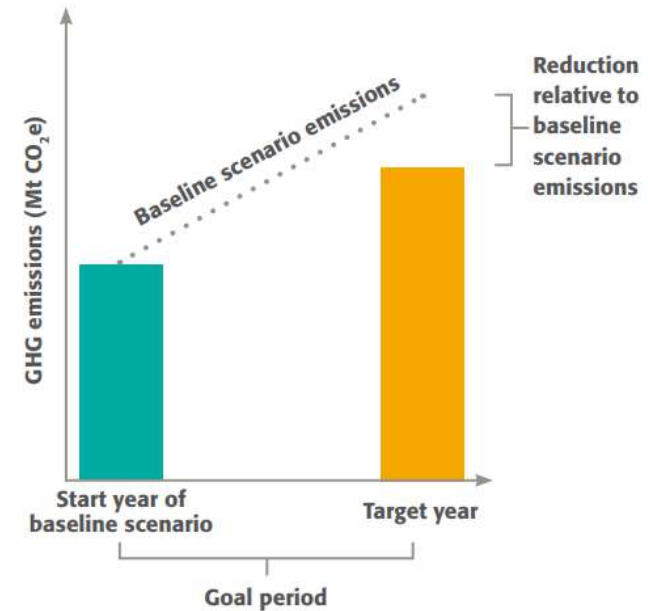


TARGET SETTING

THE OUTCOME OF GHG MEASURING



Base year
approach



Baseline
approach

The base line approach is only accepted for near-term SBT. Net-Zero emission is still required.

AMBITIOUS TARGETS

EXAMPLES OF AMBITIOUS TARGETS

NDC

- | Reduction of 30% unconditionally and 40% conditionally
- | Net-Zero 2065



IPCC

Scenarios	2030	2035	2040	2050
1.5°C Pathway	43%	60%	69%	84%
2°C Pathway	21%	35%	46%	64%



**2019 base year*

Near-term: Either absolute emission or intensity emission is acceptable

FORECASTING

HOW TO

Time Series Forecast

- | Forecast using economical model for time series consistency
- | *FORECAST.ETS*

No Data?

- | Use electricity consumption as base for scaling emissions
- | Assumptions are applicable

Near-term: Either absolute emission or intensity emission is acceptable

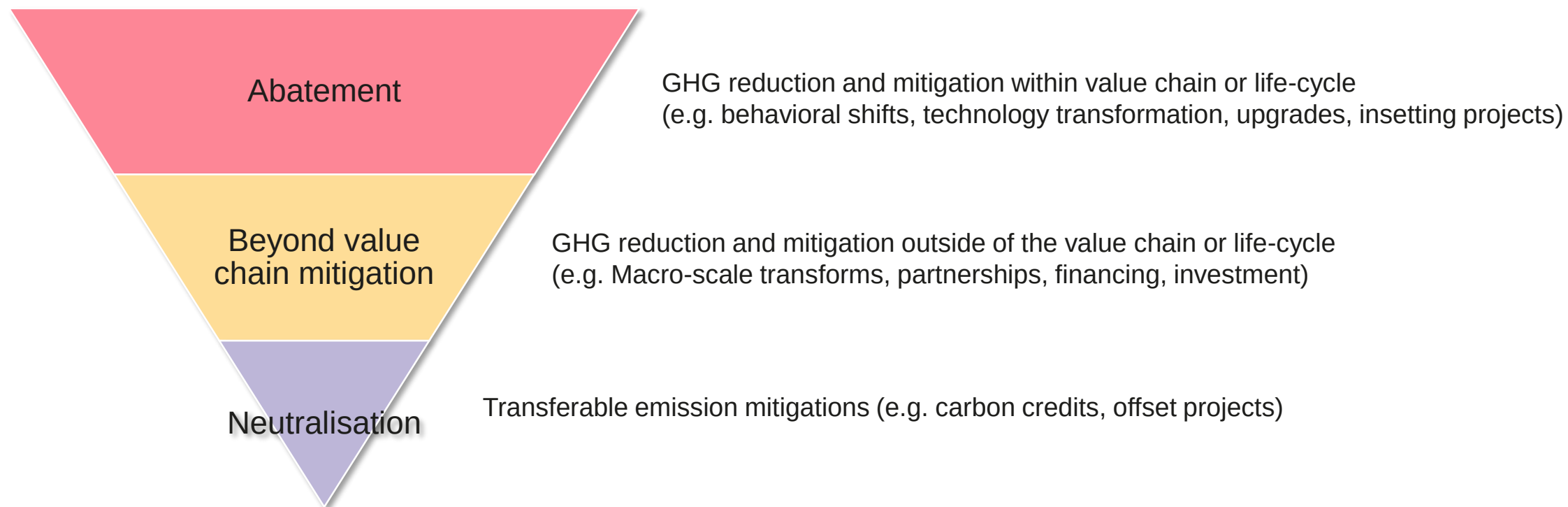
REDUCE

SCIENCE-BASED TARGET MITIGATION



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

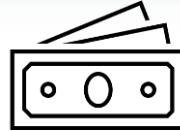


| INCLUDE



Include stakeholders
to join the journey

| INVEST



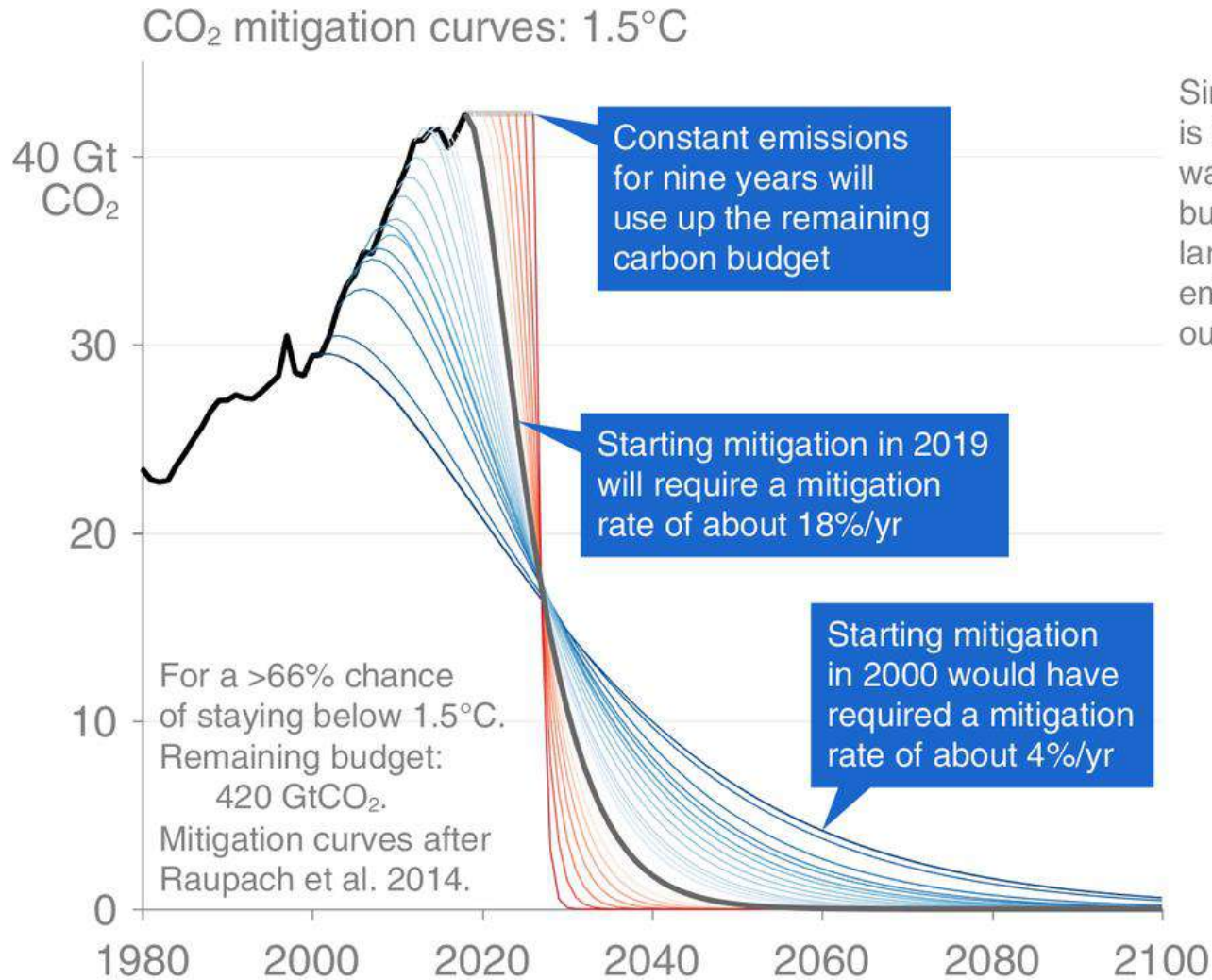
Invest in cleaner
technology or gain
investment

| INSET



Finance on material
activities or projects in
the life-cycle

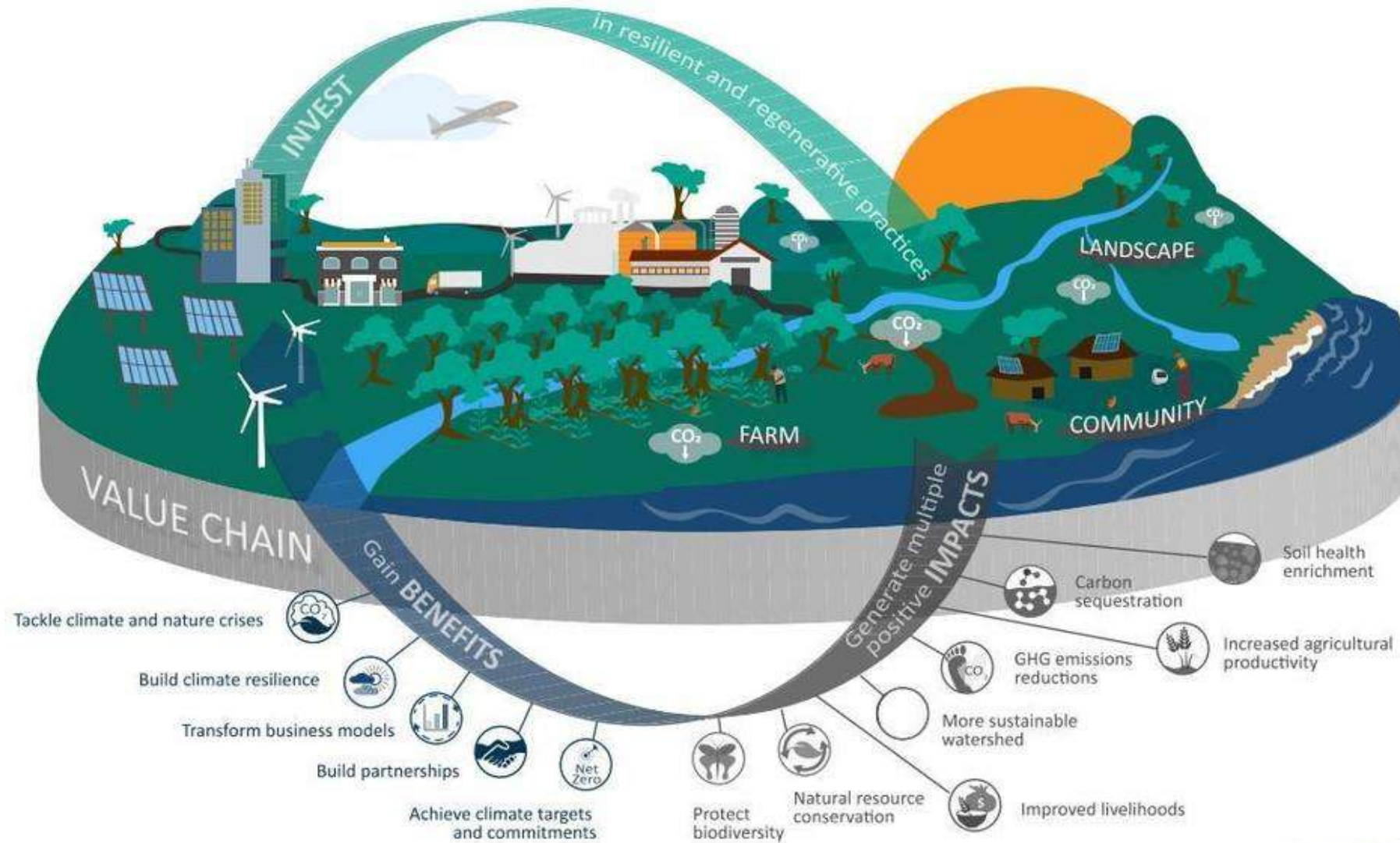
THE OPPORTUNITY COST



Since 18%/yr mitigation is impossible, the only way to achieve this budget is with very large "negative" emissions: pulling CO₂ out of the atmosphere.

The national investment to achieve 4% reduction and reach net-zero by 2050 is THB 91trillion or THB 3.4trillion (2023). By not investing, the cost increases THB 1.15trillion every year

INSETTING EMISSION (ABATEMENT)



© International Platform for Insetting

OFFSET

DIFFERENT WAYS TO OFFSET



GREENWASHING



CHULALONGKORN UNIVERSITY THESES AND DISSERTATIONS (CHULA ETD)

การฟอกเขียวด้วยการซื้อขายคาร์บอนเครดิตในประเทศไทย

Other Title (Parallel Title in Other Language of ETD)
Greenwashing by carbon credit trading in Thailand

วณิชพันธ์ กันทะวงศ์, คณะรัฐศาสตร์

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Forbes

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Carbon Neutral Claims Under Investigation In Greenwashing Probe

Amy Nguyen Contributor 

I write about sustainable business, fashion and supply chains.

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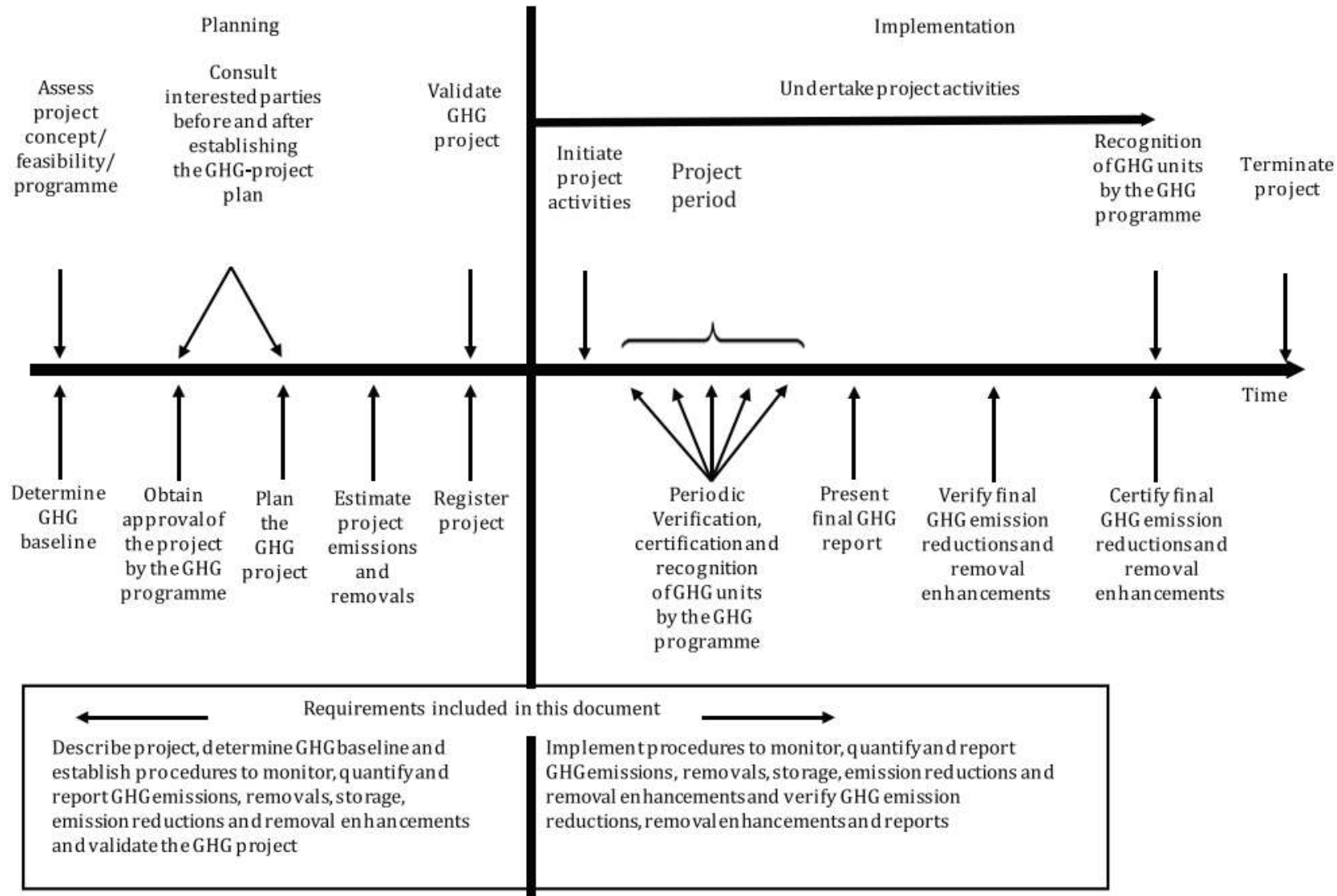
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Green
ESG & Investing

Junk Offsets Are Feeding Wave of Greenwashing, Study Shows

- Only 6% of offsets are linked to additional carbon reductions
- Eni, BA, Nestle and TotalEnergies exposed to credits in study

OFFSET PROJECT LIFE-CYCLE





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