

Avoided Emissions Fact Sheet

Urgentem has developed an innovative approach to calculate the avoided emissions for portfolios. Our approach is tailored to the needs of our clients, offering our sector-specific avoided emissions methodology, or developing bespoke company or product-specific models.

OUR APPROACH

Urgentem follows a clear approach to quantifying avoided emissions, aligning with best practices in this rapidly evolving area. Urgentem's avoided emissions offering is used for several use-cases, and we take a tailor-made approach to developing the methodology. This ensures full transparency, avoids 'greenwashing', and helps conceptualise contributions to emerging climate technologies and other indirect sources of avoided emissions. The various drivers for understanding avoided emissions within a portfolio are:



- **Reporting purposes**



- **Investment decision-making**



- **Screening and index creation**

Based on these drivers, Urgentem offers several solutions to help quantify exposure to transition opportunities.

- Urgentem offers a **sector-specific methodology**, which leverages our granular emissions data in our 30,000-security universe. This allows for quantification of avoided emissions for any number of securities. Our methodologies can be tailored for specific purposes, such as screening, and methodologies can be adapted to align to the goals of the client project.
- The second is a **bespoke, deep-dive into specific companies**, by developing models which integrate Urgentem's methodologies. This is aligned with [the Avoided Emissions Framework](#) by Mission Innovation, and follows best-practice Life Cycle Assessment principles when constructing models. These deep-dives are better suited for feeding into investment decision-making and reporting.

SECTOR-SPECIFIC APPROACH

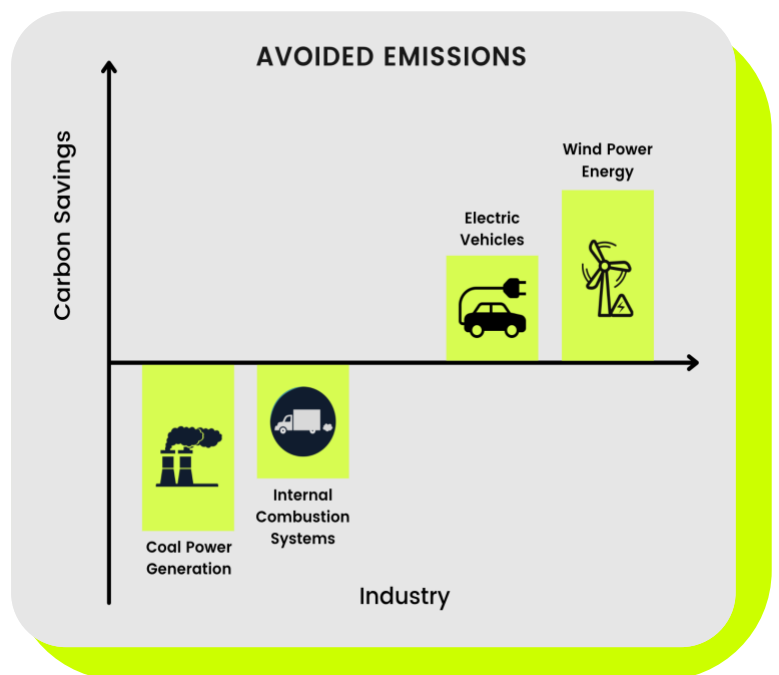
- A methodology that enables the quantitative assessment of avoided emissions of a specific sector, aiding the reporting of net carbon emissions and the identification of climate transition opportunities.
- This is a sector specific methodology that aims to quantify potential carbon savings for a wide range of companies. This methodology encompasses more than 40 sectors that are providing solutions to climate change such as Zero Emissions Vehicles, Insulation Products and Waste Management.
- Carbon savings are realised by the displacement of carbon emissions due to a product or service of a company. This is realised through green electricity production which has a lower carbon footprint than the grid average (Utilities), or by the above average carbon emissions reductions of a company's product or service within a given industry classification.
- The methodology focuses on sector-specific input and revenue proportions to various economic activities to accurately capture the proportion of business lines associated with emissions savings.

FUNCTIONALITY FOR CLIENTS

Major Asset Managers are using our granular emissions data and methodologies to analyse the avoided emissions of their portfolio and associated investment universe. This further informs their company selection process.

The methodologies are integrated into their fund's core investment decision making process and reporting.

Importantly, our methodology is available at security level, sector level or portfolio level to meet the different needs of our clients.



SECTOR-SPECIFIC EXAMPLE

Pollution Control Equipment

Example Company: Pentair

Summary of Company: Pentair plc is a global water company, delivering smart, sustainable water solutions for residential, commercial, industrial and agriculture applications. The Company's

solutions enable people, business and industry to access clean, safe water, reduce water consumption, and recover and reuse it.

Proposed Carbon Savings Mechanism: Pollution Control Equipment reduces Oil & Gas fugitive emissions by around 50%.

Generic formula applied to category:

$$\text{Carbon Savings} = \text{Fugitive Emissions Intensity} \times \text{Conversion Factor } FCE \times \text{Revenue}$$

Where,

- *Fugitive Emissions Intensity* = The average percent of Scope 1 emissions attributed to fugitive emissions for Oil & Gas companies, calculated using emissions data $\times 0.5$
- *Conversion Factor FCE* = Average Scope 1 Intensity for Pollution Control Equipment / Average Scope 1 Intensity for Oil and Gas
- *Revenue* = Annual Revenue for the firm

COMPANY-SPECIFIC APPROACH

Urgentem recognises that there are many nuances at the company or product level which come into play when examining avoided emissions. We work with leading investment managers and other financial institutions to delve deep into product and company-level data to construct bespoke avoided emissions methodologies.

Urgentem takes a Life Cycle approach to avoided emissions, creating both backward and forward-looking potential avoided emissions. We utilise our robust emissions dataset as a basis for further analysis, constructing models to estimate avoided emissions at the product and service level, which can be aggregated to the company level and portfolio level.

Urgentem’s company-specific approach follows these steps:

- Identify avoided emissions mechanisms
- Materiality assessment - Are the avoided emissions material in the context of company emissions?
- Data review – what company-specific or Life Cycle Assessment data is available?
- Life Cycle Assessment Modelling
- Comparative scenarios / “What if” scenario development
- Results, methodological write-up and guidance on reporting

Once the modelling is complete, Urgentem provides to clients our full methodological details and clear assumptions and limitations of the models. This can then be used to engage with the investee

companies, to gather the data required to better understand their contributions in more depth.

COMPANY-SPECIFIC EXAMPLE

Electric Vertical Take-off and Landing vehicles (eVTOL)

Summary: Our client is interested in understanding the potential (forward-looking) avoided emissions from an eVTOL company. Urgentem collected data from Life Cycle Assessment databases, company publications and other sources.

Company-specific parameters:

- Energy consumption for X length journey (Hover + Cruise speed energy)
- Grid factors in location (production and operating country) + forward looking projections
- eVTOL type and vehicle inputs
- Battery capacity and type
- Battery / vehicle life time
- Average number of passengers, length of trip
- Weight of eVTOL vehicle
- Sales / operational projections

Baseline scenario: Equivalent journey length travelled by fossil-fuel based vehicle.

Urgentem applied these company-specific factors to peer reviewed Cradle - Grave Life Cycle Assessment data and modelled future emissions savings associated with these scenarios. Parameters can be changed to reflect different baseline scenarios and forward looking scenarios to stress test the results.

SECTOR COVERAGE: AVOIDED EMISSIONS

- Agricultural Chemicals
- Aluminium & Advanced Materials
- Auto Electrical
- Auto Parts
- Automobiles
- Autonomous Vehicles
- Base Metals
- Biofuels
- Building Products Commercial Vehicles (Electric Trucks)
- Clean Power & Smart Grids/Networks
- Commercial & Residential Building Equipment & Systems & HVAC
- Containers & Packaging
- Electrical Components

- Electrical Measuring Instruments
- Electronic Connectors
- Energy Efficient Food Retailers
- Engineering Software
- Environ Engineering & Consulting
- Factory Automation Equipment
- Flow Control Equipment
- Fuel Cells & Industrial Batteries
- Glass Products
- Hydro Energy Equipment
- Industrial Automation Controls
- Insulation Products
- Lighting Fixtures
- Meat Alternatives
- Other Mined Minerals
- Pollution Control Equipment
- Power Transmission & Distribution Equipment
- Rail Freight & Railway Services
- Semiconductor Devices, Semiconductor MFG, and Analog ICs
- Solar Energy Equipment
- Sustainable Packaging
- Utilities
- Vehicle Batteries
- Waste Management
- Wind Energy Equipment
- Wire & Cable
- Zero Emissions Vehicles
- Zero Emissions Vehicles Infrastructure

CLIENT TESTIMONY



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Urgentem have been an important partner in pioneering the carbon avoided concept. The Urgentem team have been very willing to provide time and support to ensure a high quality method and this concept has supported us in our identification and engagement with leading companies driving decarbonisation”

- **Ninety-One (previously Investec Asset Management) | Global Environment Fund**

Please get in touch with us to find out more about our award-winning Avoided Emissions methodology and how this can enable the generation of opportunities within the low-carbon transition.