

An aerial photograph of a dense, vibrant green forest. A dark, winding river flows through the center of the forest, creating a meandering path. The trees are thick and cover the entire landscape, with a small, lighter green clearing visible on the left side of the river.

Environmental Catalyst and Metal Solutions

Pioneering Clean Air and Circular Solutions

August 1, 2025



We create chemistry

Agenda

1. Our Strategy

- Sustainability vision
- 50 years of clean air
- Strategic pillars and goals
- Alignment to U.N. SDGs
- Enabling sustainable transformation at our customers

2. Innovation in sustainable products

- Product Carbon Footprint (PCF)
- Environmental performance - Scope 1 & 2
- PCF optimization
- Process optimizing
- Environmental performance - Scope 3
- Verdium™

3. Responsible Supply Chain, LPPM and Responsible Care



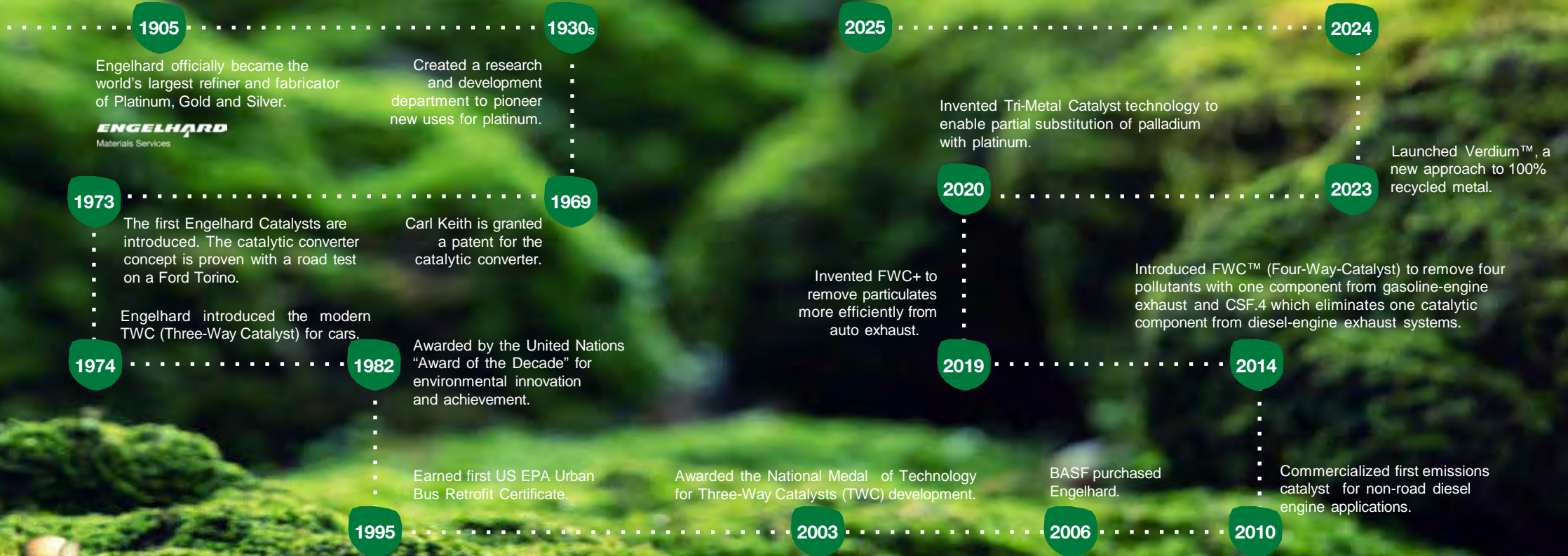


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Our responsibility
is sustainability to
our legacy and our
future.



50 years of cleaning the air continues



Strategic pillars and goals as part of BASF Group

Global regulatory compliance and global operations: Reducing our environmental footprint through renewable energy

Supporting transition to low-carbon economies: Integrating sustainability into our business operations, supply chain, and customer solutions. Innovating in hydrogen fuel cells and electrolyzers.

Goals (BASF Group)

- **25% Scope 1 & 2 GHG reduction by 2030**
- **15% Scope 3.1 Raw materials reduction by 2030**
- **Net Zero by 2050**

* Compared to 2018 as baseline

Sustainability at ECMS

Greenhouse Gas Emission Reduction Targets by 2030:



50 %



55 %



50 %

Strategic alignment

BASF contributes to the U.N. SDGs through products and solutions along the value chain.

3 GOOD HEALTH
AND WELL-BEING



5 GENDER
EQUALITY



8 DECENT WORK AND
ECONOMIC GROWTH



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



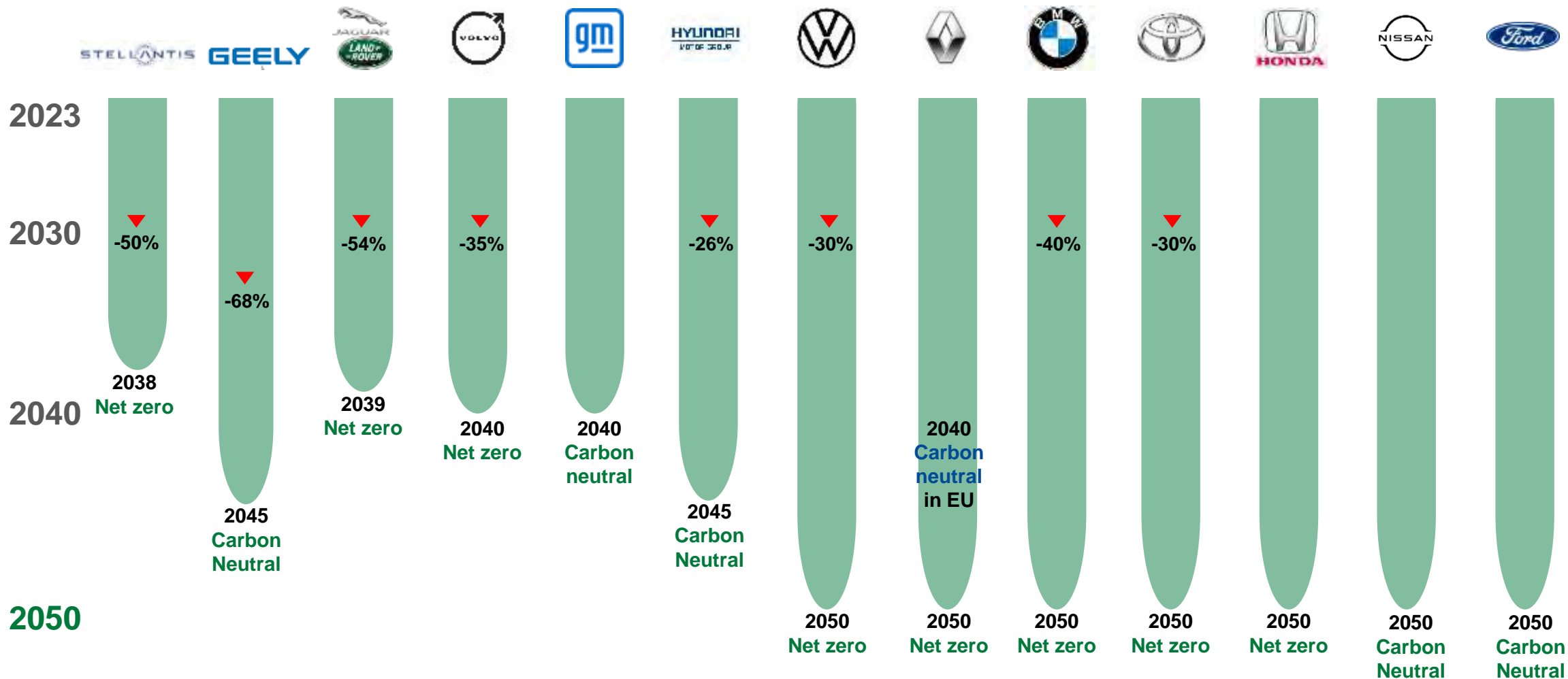
13 CLIMATE
ACTION



We report according to Corporate Sustainability Reporting Directive.



Our circular PGM solutions and low carbon products support automotive OEMs to meet their targets*



* not a comprehensive customer list

Support sustainable transformation at our customers

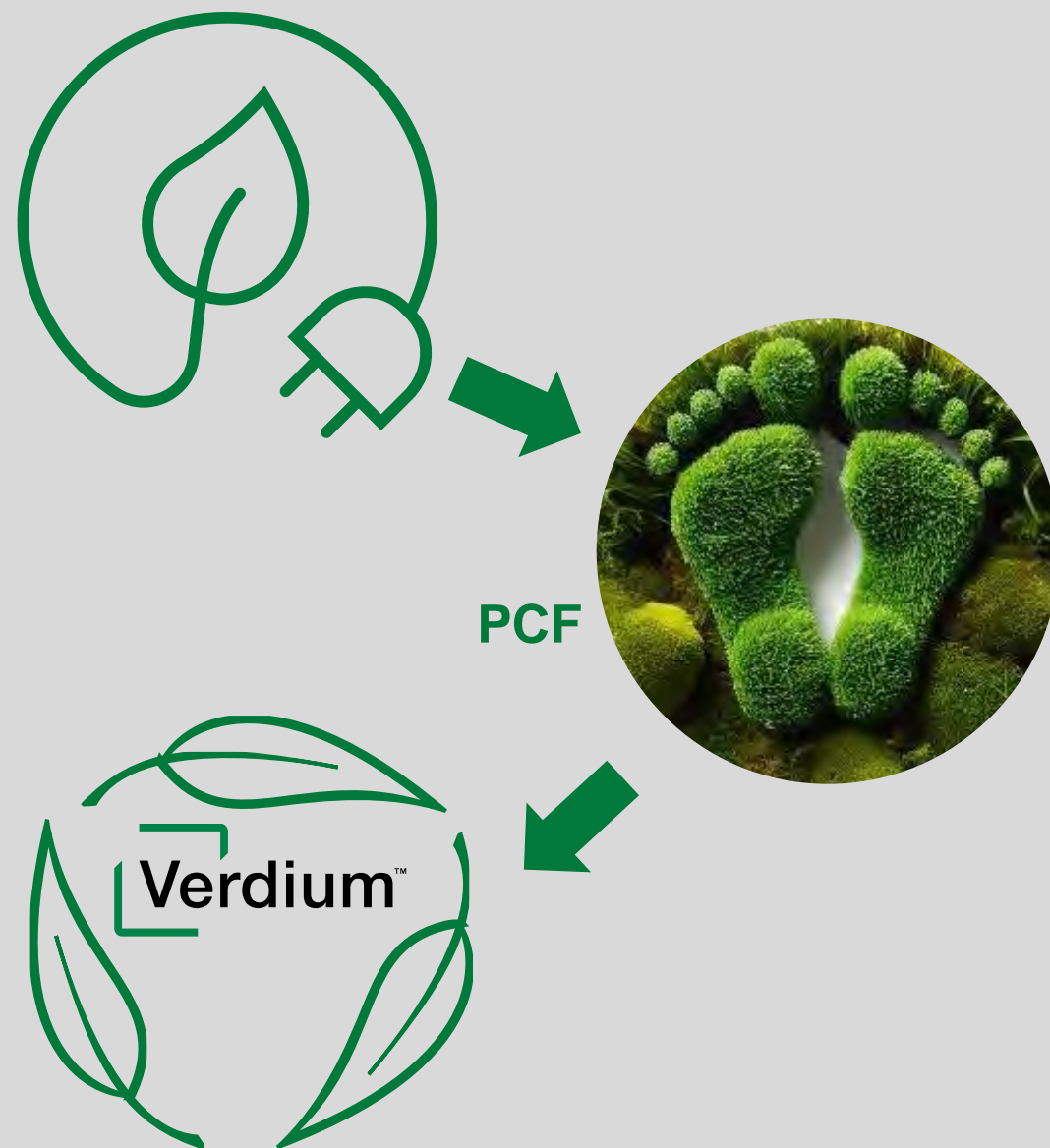
- As part of BASF Group, **we shape** the transformation toward sustainable product portfolio.
- **We offer** products with reduced product carbon footprint (PCF) across our portfolio.
- **We drive** sustainable-future solutions and net-zero measures at scale.
- **We are fully committed** to our climate protection targets for 2030 and 2050 and the transformation of the chemical industry.
- **We made significant progress** by procuring renewable energy to power our plants, optimizing process technologies to reduce GHG emissions, and by assuring that our mining and raw material suppliers are responsible.



Innovation in sustainable products

Suite of complimentary, sustainability offerings tailored to our customers' sustainability needs.

- Verdium™: A recycled PGM offering with a certified carbon footprint significantly lower than mined metals
- Supporting OEMs in reducing their product carbon footprints and meeting regulatory requirements
- Expanding our product portfolio to include next-generation catalysts for hydrogen fuel cells and electrolyzers

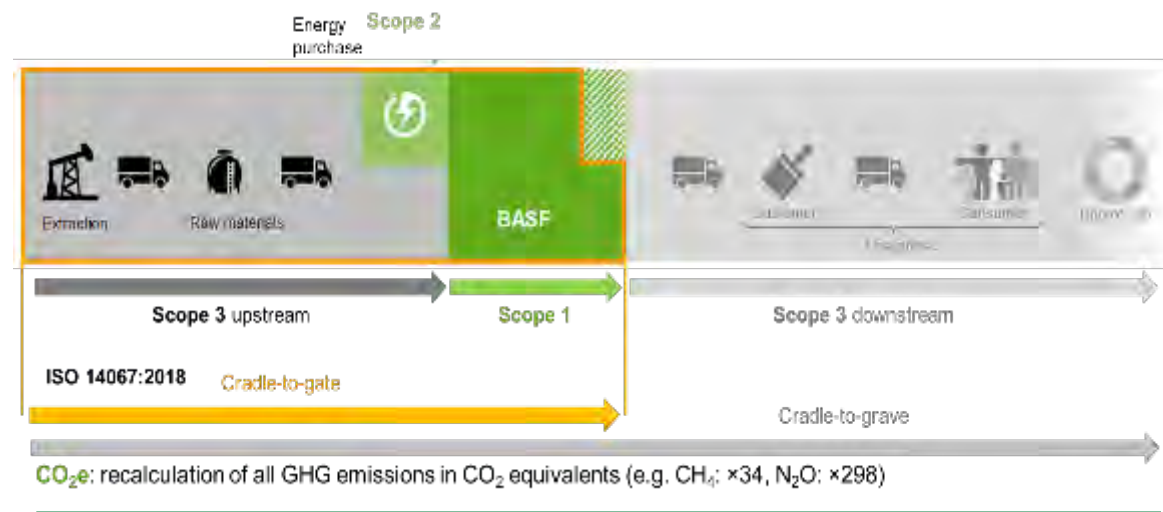


Product Carbon Footprint (PCF)



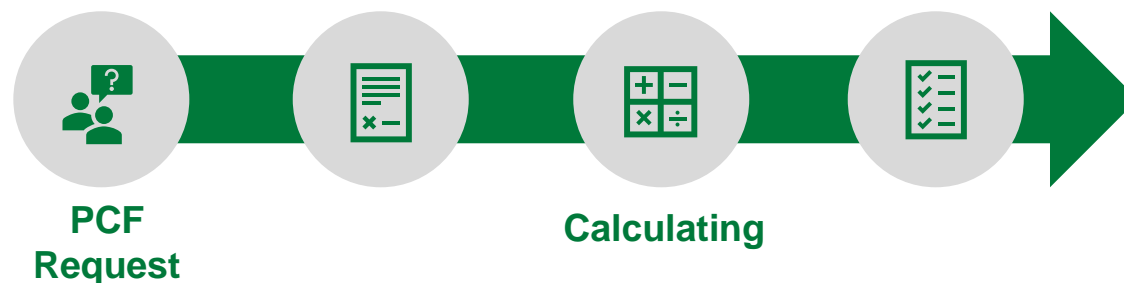
PCF enables our joint sustainability journey and highlights how we improve the carbon footprint.

PCF summarizes the specific amount of **greenhouse gas (GHG) emissions (Scope 1, 2, 3 upstream)** that are associated with a product **from cradle-to-gate** in **kg CO₂e/kg** of product.



NDA and contract
according to project scope

Sharing PCF



Environmental performance - Scope 1 & 2



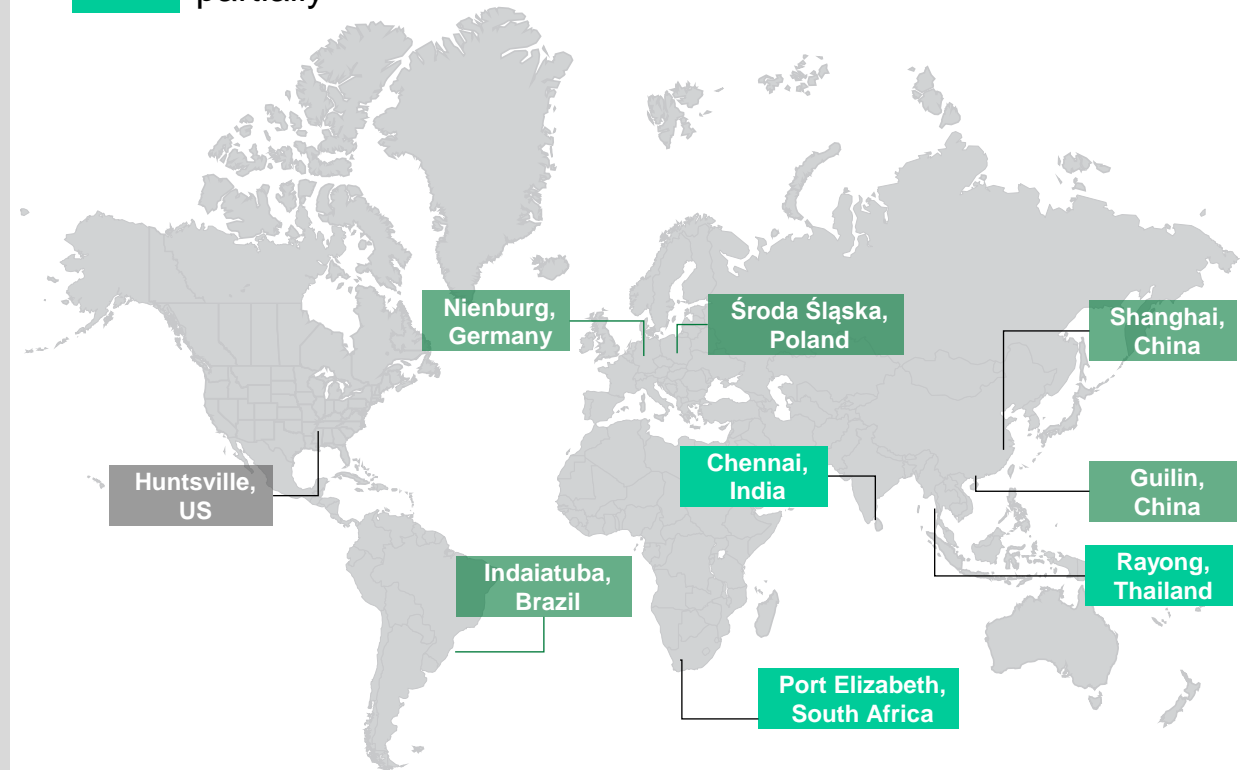
Globally our production plants will use 100% renewable energy by 2030. For example, in **Europe our plants are already operating with 100% renewable electricity.**

Key Initiatives

- **Solar power installations** at Chennai, Shanghai, Rayong, and Port Elizabeth, generating 4,5 MWh of renewable energy
- **Zero scope 2 emissions** achieved at Guilin, Indaiatuba, Nienburg, Sroda Slaska, and Shanghai through **renewable energy procurement**
- **Process optimization projects**, reducing natural gas consumption


CC-EE sites operating with renewable electricity

100%
partially



Environmental performance: Scope 1 & 2

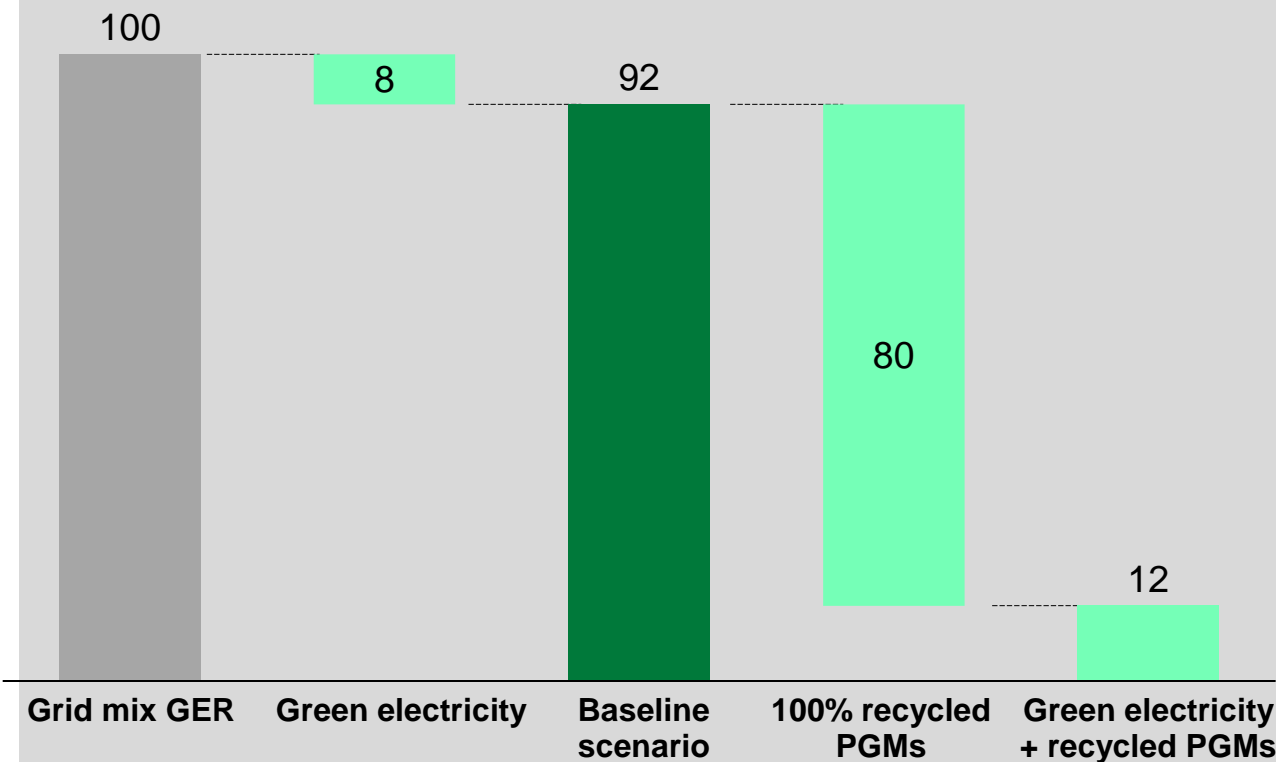
Example: PCF optimization of a Cu-SCR containing diesel system

 Green electricity allows **PCF reduction average 8%.**

 Green electricity and recycled PGM together allow **PCF reduction average 88%.**



Cradle-to-gate PCF for a Cu-SCR containing diesel system after-treatment system reduction measures, excl. substrates



Calculated according to IPCC AR6, excluding biogenic carbon, Grey electricity scenario was calculated with a country-specific electricity mix. Baseline and Grey electricity scenarios only differ in the electricity mix used. Baseline scenario 100% virgin material is assumed as a conservative basis. For Green electricity + recycled PGMs scenario 100 % recycled material is assumed. Included dimensions and technologies as shown on slide 9. Substrates are excluded from the calculation, but the energy consumption of all process steps is included.

Environmental performance: Scope 3



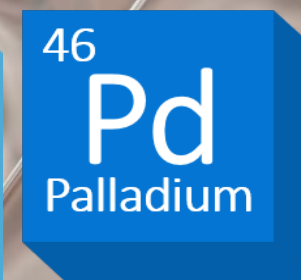
ECMS scope 3 emissions reduced by 14% year-over-year in 2024, primarily due to decreased primary PGM usage.

Breakdown of scope 3 emissions:

- Primary PGMs: **91% of scope 3 CO₂e**
- Recycled PGMs: **<1 % of scope 3 CO₂e**, highlighting the environmental benefits of recycling
- Non-PGM raw materials and other upstream & downstream emissions: **8% of scope 3 CO₂e**

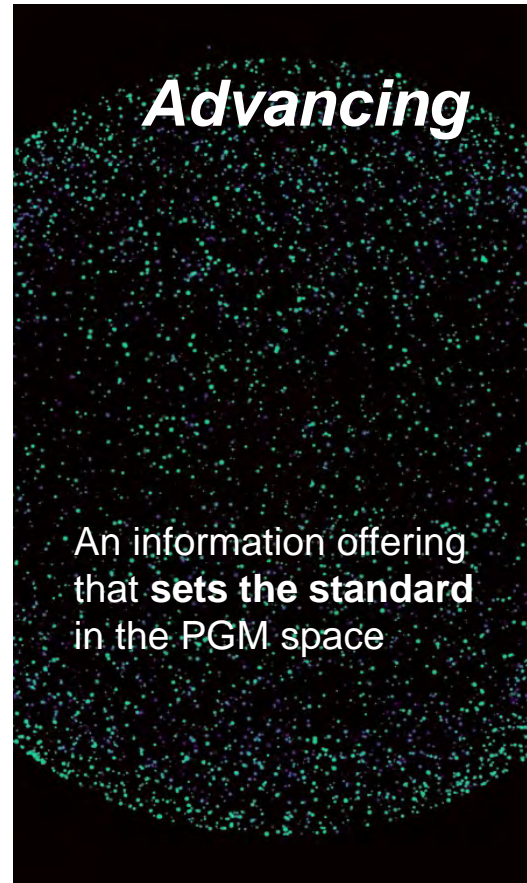
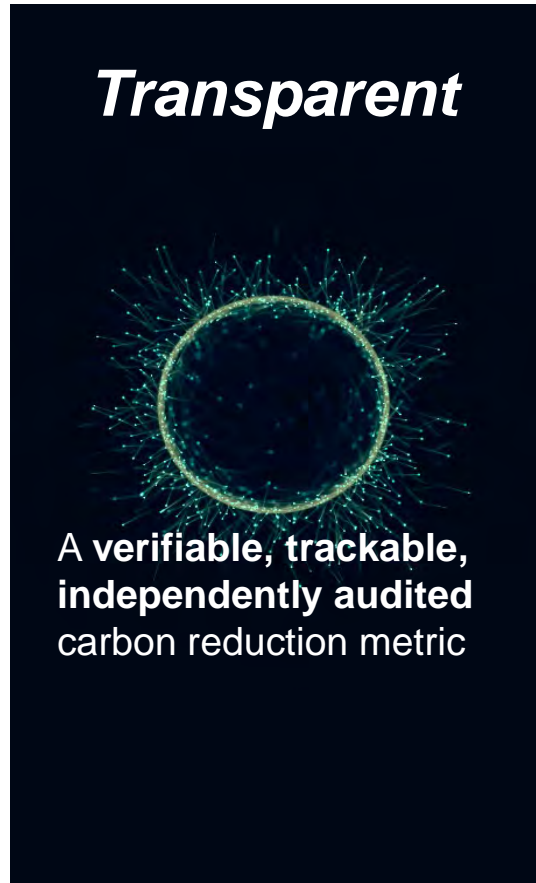
Supplier engagement targets:

- By 2025: **25% of non-PGM suppliers to provide PCFs and ESG data**
- By 2027: **50% compliance**



Verdium™ – 100% recycled Platinum Group Metal (PGM)

CO₂ footprint of recycled PGM is significantly lower than mined PGM¹



ECMS developed **Verdium™** using a **mass balance approach**

UL Solutions provides independent, **third-party validation** of our physical **chain of custody** and mass balance accounting

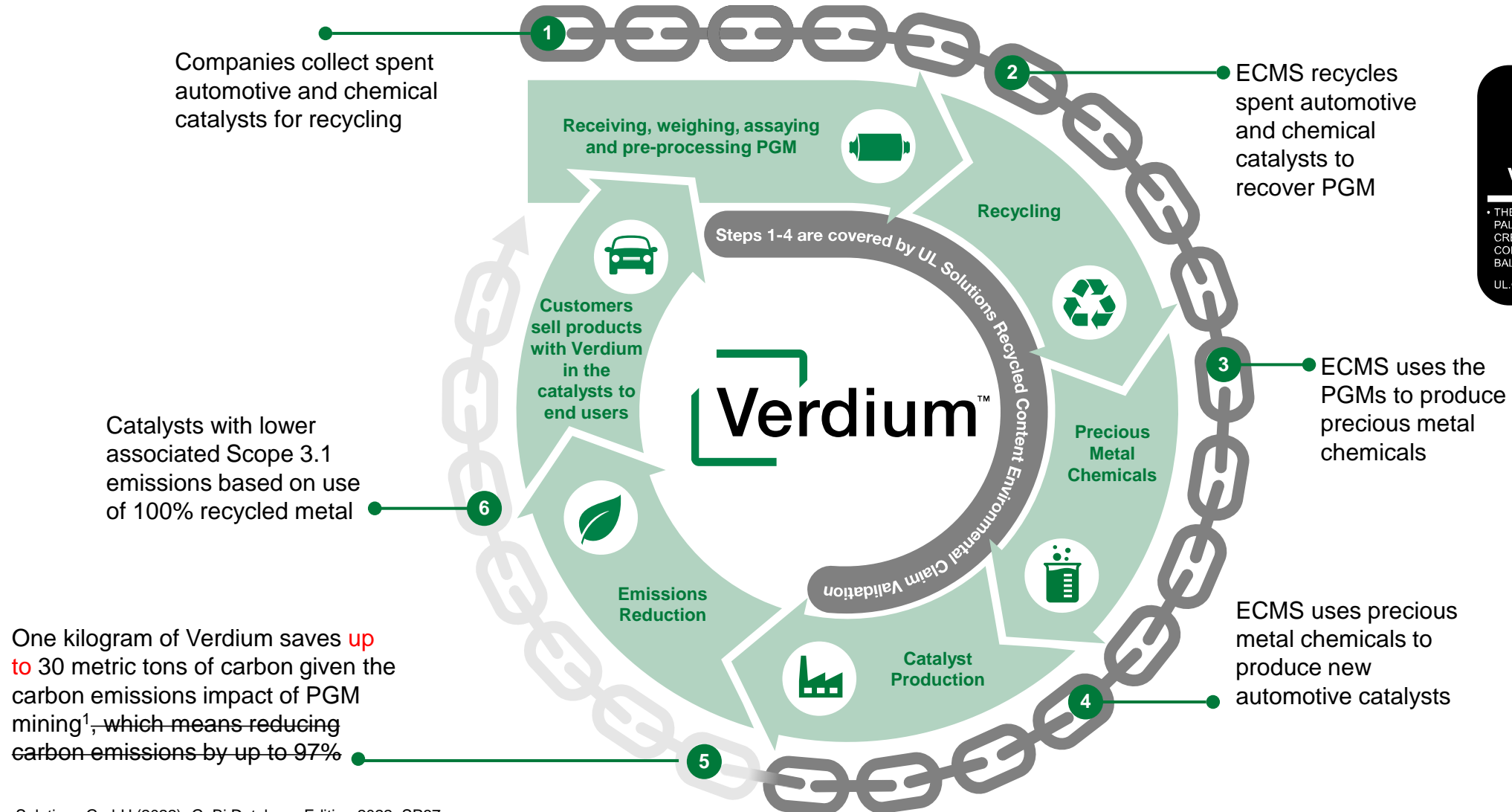
PGMs are attributed 100% recycled content using this mass balance approach

Documented verification confirms amount of recycled metals purchased, which can be traced to a concrete carbon reduction metric.

¹International Platinum Group Metals Association, Life Cycle Assessment on global primary and secondary production of Platinum Group Metals, Reference year 2022

Verdium harnesses the ECMS circular economy to reduce customers' Scope 3.1 emissions associated with their purchase of PGM

Complete visibility allows for robust chain of custody claim verification of 100% recycled metal based on mass balance validated by UL Solutions



¹ Sphera Solutions GmbH (2022): GaBi Database Edition 2022, SP37

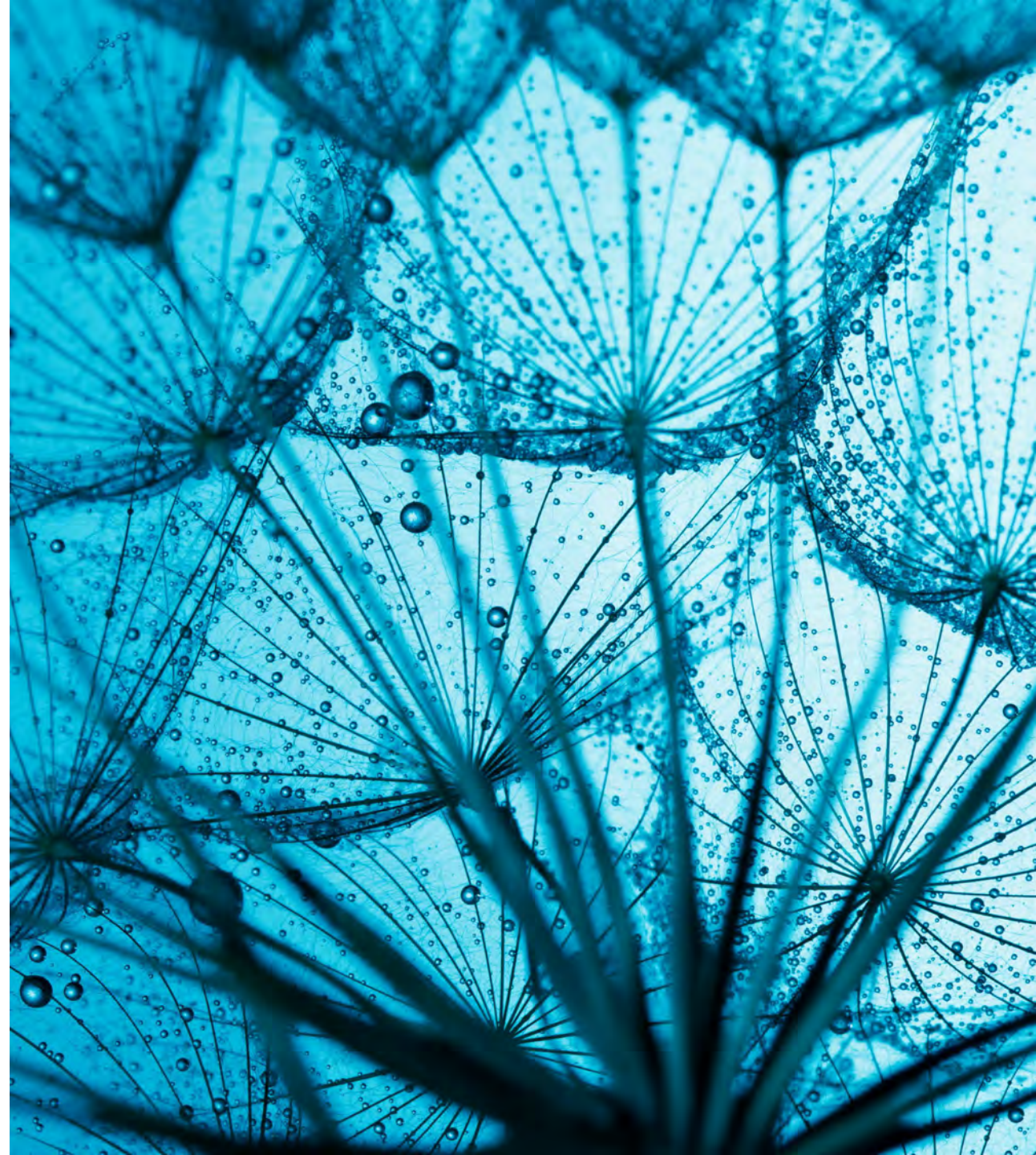
Responsible Supply Chain



Emphasis on ethical
and responsible
sourcing of PGMs

**Contractual requirements for suppliers to
comply with IRMA or equivalent
standards, covering:**

- Environmental management, GHG emissions, and biodiversity protection
- Fair labor practices, occupational health and safety, and community engagement



ECMS is ensuring LPPM Responsible Platinum/Palladium sourcing

ECMS is included in the
LPPM Good Delivery List



LONDON
PLATINUM &
PALLADIUM
MARKET

- **Specifications:** Form, weight, purity, markings appearance and conformance with LPPM Responsible Sourcing Guidance requirements
- **Responsible Platinum/Palladium Guidance:** OECD* 5 step framework of responsible sourcing initiative
- **Certification Scheme:** Requires annual third-party audit confirmation of responsible sourcing management
- **Good Delivery List:** Maintained by LPPM and lists acceptable Melters and Assayers

*OECD: Organization for Economic Co-operation and Development

Our commitment to Responsible Care

We are dedicated to providing products and services that meet the highest quality, safety, energy utilization and sustainability standards.

Our sites aim to meet Environment, Health, Safety, Security, Energy and Quality needs and expectations of our customers, employees, partners and the communities within which we operate.



ISO certifications of our sites

- Cinderford, UK: 9001, 14001
- Hofors, Sweden: 9001, 14001
- Fremont, CA, USA: 9001
- Rome, Italy*: 9001, 14001, 17025, 45001
- Seneca SC, USA: 9001
- Shanghai, China*: 9000, 14001, 45001, 50001
- Union, NJ, USA: 17025, 17043
- Huntsville, USA: 9001, 14001, 140001, 16949
- Nienburg, Germany: 14001, 45001, 50001
- Hannover, Germany: 14001, 45001, 50001
- Sroda Slaska, Poland: 14001, 45001, 50001
- Port Elizabeth, South Africa: 14001, 45001, 50001
- Indaiatuba, Brazil: 5001, 140001, 16949
- Shanghai, China: 9000, 14001, 16949, 45001, 50001
- Rayong, Thailand: 9000, 14001, 16949, 45001
- Chennai, India: 14001, 16949, 45001
- Guilin, China: 9000, 14001, 16949

** not part of ECMS, but BASF Parent Company*



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