

We create chemistry for a sustainable future

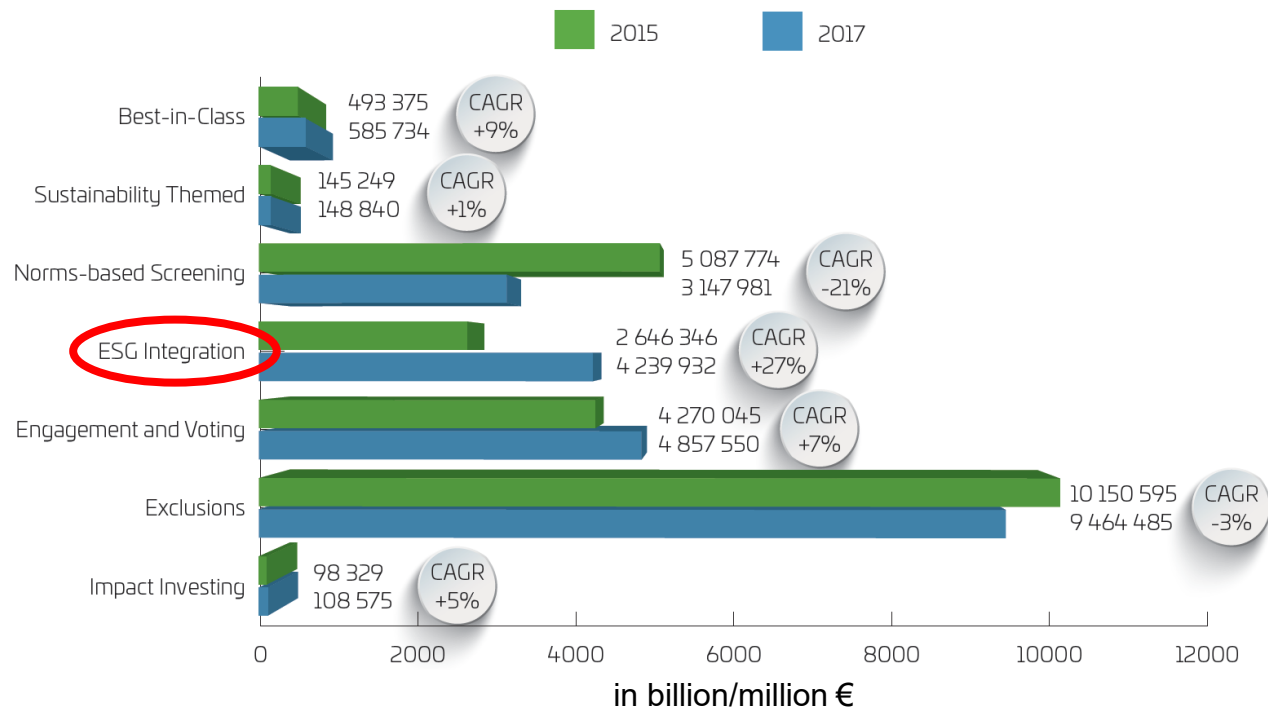
Dr. Tim Balensiefer
DIRK Creditor Relations Tagung, Frankfurt



Cautionary note regarding forward-looking statements

This presentation contains forward-looking statements. These statements are based on current estimates and projections of the Board of Executive Directors and currently available information. Forward-looking statements are not guarantees of the future developments and results outlined therein. These are dependent on a number of factors; they involve various risks and uncertainties; and they are based on assumptions that may not prove to be accurate. Such risk factors include those discussed in Opportunities and Risks on pages 123 to 130 of the BASF Report 2018. BASF does not assume any obligation to update the forward-looking statements contained in this presentation above and beyond the legal requirements.

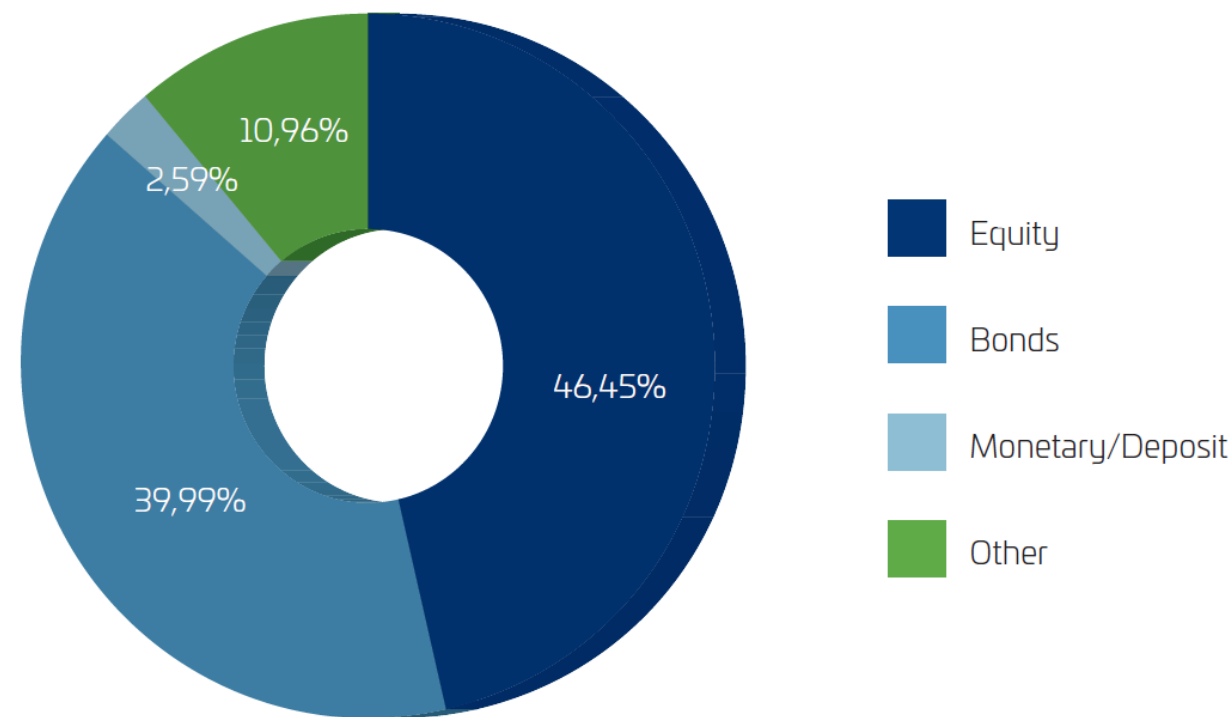
Overview on Responsible Investment (SRI) strategies in Europe



Source: Eurosif study 2018

- Total assets under management (AuM) in SRI ~€23 trillion (Europe), high market penetration
- Exclusion strategies (mostly controversial weapons, tobacco)
- Investors are increasingly considering divestment from “stranded” fossil fuel assets
- Growing of SRI into mainstream confirmed (ESG integration into mainstream investment processes)
- Concerns around greenwashing and the lack of transparency are the top deterrents from SRI

SRI asset allocation



Source: Eurosif study 2018

Responsible Investment

In the lime light

- Historical focus: health and safety risks
- Today: broader view on sustainability, including risks and opportunities across topics such as
 - Climate change mitigation
 - Scarce resources
 - Health and safety
 - Supply chain responsibility
 - Human capital, social inequalities
 - Sustainable agriculture
- Lack of standardized definition of sustainability, lack of comparability, fear of greenwashing
- EU action plan for sustainable finance including taxonomy, holistic impact valuation approaches
- Investor and public initiatives for climate change mitigation

Responsible Investment

Integral part of BASF's Investor Relations

- “BASF IR Manager Sustainability” since 2006
- Close link to BASF's networks
(corporate strategy, business units, health and safety, reporting team, communication, advocacy, finance)
- Significant management attention
- Participation in strategy development and implementation
- Dual role: BASF messages to the financial markets, investor engagement in BASF
- E-mail enquiries, questionnaires, calls, website, publications
- Roadshows, conferences, capital market events, investor visits
(not only ESG analysts; more and more often, portfolio managers and investor hierarchies are involved)

Sustainable Finance at BASF



Financing

- Engaging with green loans in cooperation with KfW
- Discussions with EIB and KfW Ipex about green financing opportunities (e.g., battery materials)
- Incorporating legal prerequisites in debt issuance program for potential ESG transactions
- Applying for funds to finalize a green bond framework in 2019



Communities and Communication

- Actively supporting sustainable finance activities such as UN Global Compact CFO Task Force for the SDGs, TCFD and Value Balancing Alliance
- Dedicated team, working exclusively on sustainable finance and constantly monitoring developments in the ESG capital markets



ESG Rating

- Active dialogue with ESG rating agencies, creating transparency for investors

BASF in sustainability ratings and rankings

CDP

As one of the world's leading companies in reporting on climate protection and in sustainable water management, BASF has been included in the "CDP Climate A" list 2018 (2017: "A-") and received an "A-" rating in the water category



MSCI ESG Research

In 2019, BASF is again rated "AA" and ranks second in "Diversified Chemicals"



FTSE4Good Global Index

BASF has been included again in the FTSE4Good Global Index 2019, receiving the highest ESG rating score in the chemical industry



Professionalization of ESG rating agencies

Established financial rating agencies expand into ESG ratings

- Mergers of ESG rating agencies, e.g., Vigeo (France) and Eiris (UK) in 2015
- Controlling stake in Trucost (UK) acquired by S&P in October 2016
- Majority stake in VigeoEiris acquired by Moody's in April 2019
- In November 2019, S&P acquired the ESG Ratings business of RobecoSAM

⇒ Further market consolidation and standardization expected

Market outlook

- **Ratings**

Credit rating agencies' tools to increase awareness and to give market participants greater transparency

- **Regulation**

EU taxonomy to harmonize the market by defining a uniform set of criteria to determine which economic activities are environmentally sustainable

- **ESG bonds**

Increasing issuance of social- and sustainable-labelled bonds driven by higher investor demand as well as more diverse instruments (e.g., SDG-linked bonds, blue bonds)



We create chemistry

Our ambitious financial and nonfinancial targets

Business success tomorrow means creating value for the environment, society and business

Financial targets

Grow **sales volumes** faster than global chemical production every year



Increase **EBITDA** before special items by 3% to 5% per year



Achieve a **return on capital employed (ROCE)**¹ considerably above the cost of capital percentage every year



Increase the **dividend per share** every year based on a **strong free cash flow**



Nonfinancial targets

Grow **CO₂-neutrally** until 2030



Achieve **€22 billion** in **Accelerator sales**² by 2025



Cover **90%** of our relevant spend³ with **sustainability evaluations** by 2025, and have **80%** of our suppliers **improve** their performance upon re-evaluation



More than **80%** of our **employees** feel that at BASF, they can **thrive** and **perform at their best**



¹ Return on capital employed (ROCE) is a measure of the profitability of our operations. We calculate this indicator as the EBIT generated by the operating divisions as a percentage of the average cost of capital basis.

² Accelerator products are products that make a substantial sustainability contribution in the value chain.

³ We understand relevant spend as procurement volumes with relevant suppliers.

Resource efficiency

BASF is committed to climate protection



- BASF is committed to contributing to the Paris climate agreement
- Climate change and global warming are among the most pressing challenges of our time
- BASF uses carbon raw materials responsibly: 75% of carbon converted to products, 25% consumed for process energy and converted to CO₂¹
- 22 million tons of CO₂ emissions by BASF worldwide in 2018 compared to 10–30 million tons per year for one coal-fired power plant
- Customers' use of BASF's climate protection products sold in 2018 avoided 640 million tons of CO₂ equivalents (thereof 5% attributable to BASF)²
- European emissions trading benchmarks show that our chemical plants operate at above-average energy efficiency

¹ BASF carbon mass balance calculation (2018, non-audited, without Oil & Gas)

² Based on the chemical industry standard of the International Council of Chemical Associations and the World Business Council for Sustainable Development

Verbund – unique competitive advantage

Actively managed in line with market requirements

Geismar



Antwerp



Ludwigshafen



Nanjing



Freeport



Zhanjiang

Kuantan



Combined
heat and power plants
and integrated energy
Verbund prevented
6.3 million tons
of CO₂ emissions
in 2018

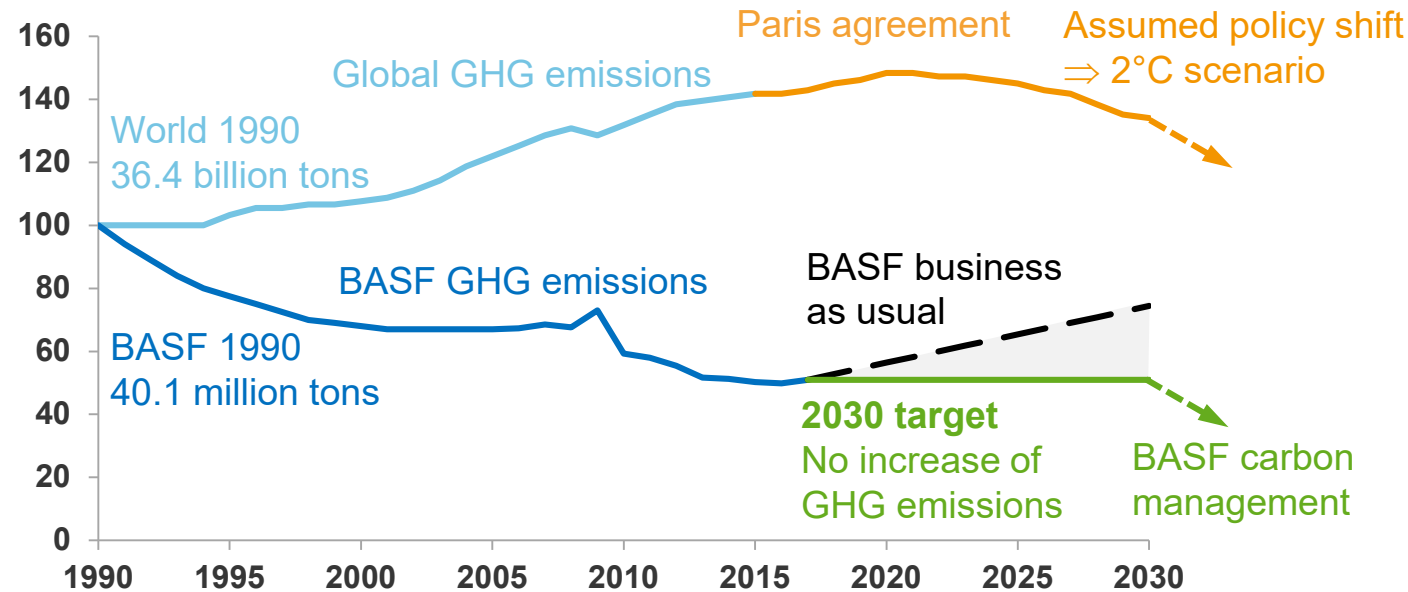
Synergies
in **logistics** and
infrastructure,
minimization of
waste

CO₂-neutral growth until 2030

Creating value to society and contributing to a sustainable development

Absolute greenhouse gas (GHG) emissions

Indexed (1990 = 100)



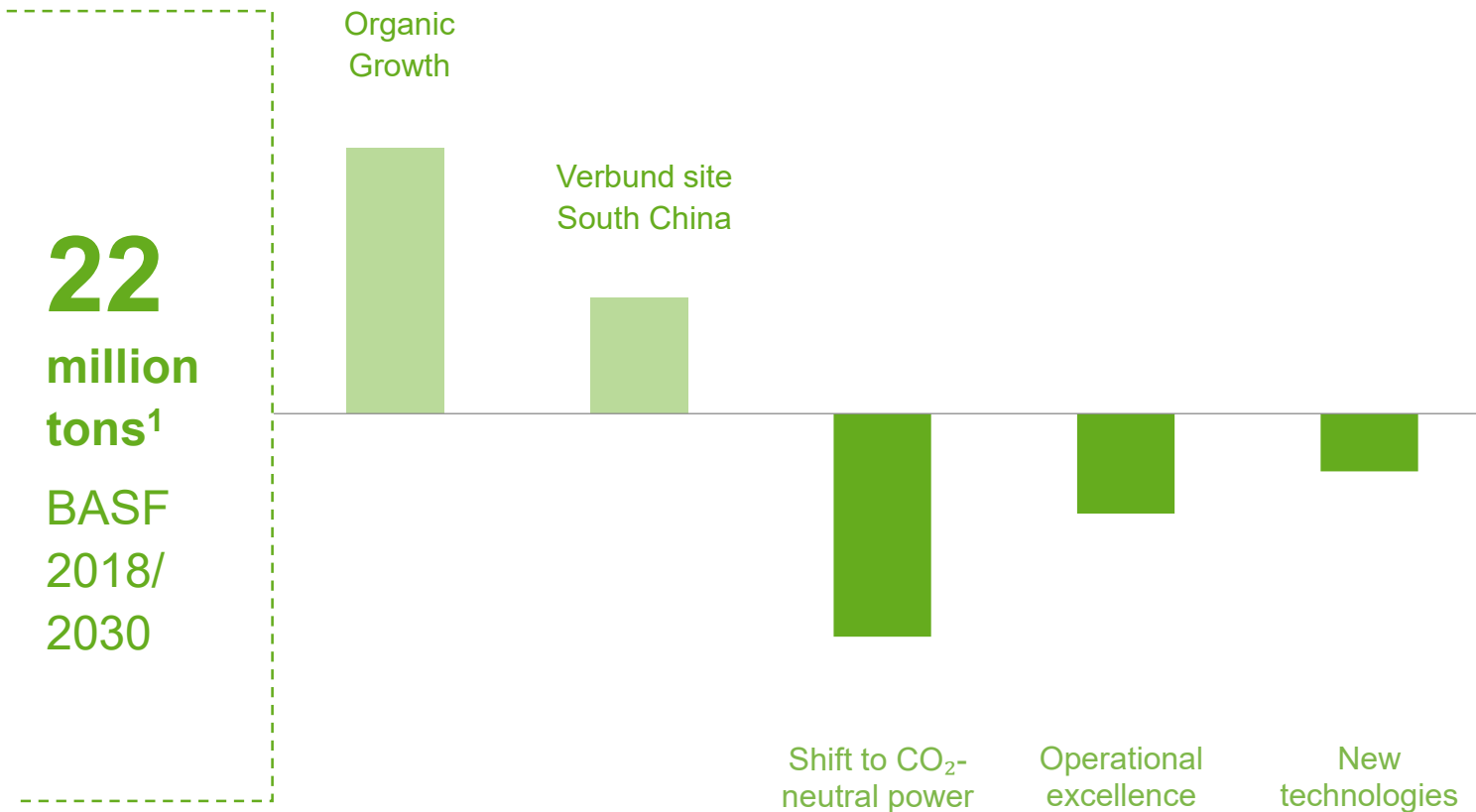
- Since 1990, we have doubled our production volumes and nevertheless cut our greenhouse gas emissions in halves
- We will grow our production volumes without adding further CO₂ emissions¹ until 2030
- We support the recommendations of the Task Force for Climate-related Financial Disclosure (TCFD)

¹ BASF operations excluding the discontinued oil and gas business; includes other greenhouse gases according to the Greenhouse Gas Protocol, which are converted into CO₂ equivalents

Key measures to implement CO₂-neutral growth

Global carbon management

GHG emissions (million tons CO₂ equivalents), scope 1 and 2



- Carbon intensity to be reduced by 30%
- To achieve this, we establish a global carbon management that involves
 - further improvements of energy and process efficiency
 - continued operational excellence measures
 - shifting our energy mix towards renewable energies
 - portfolio development
 - a research program to develop breakthrough technologies for those basic chemicals which are most energy consuming²

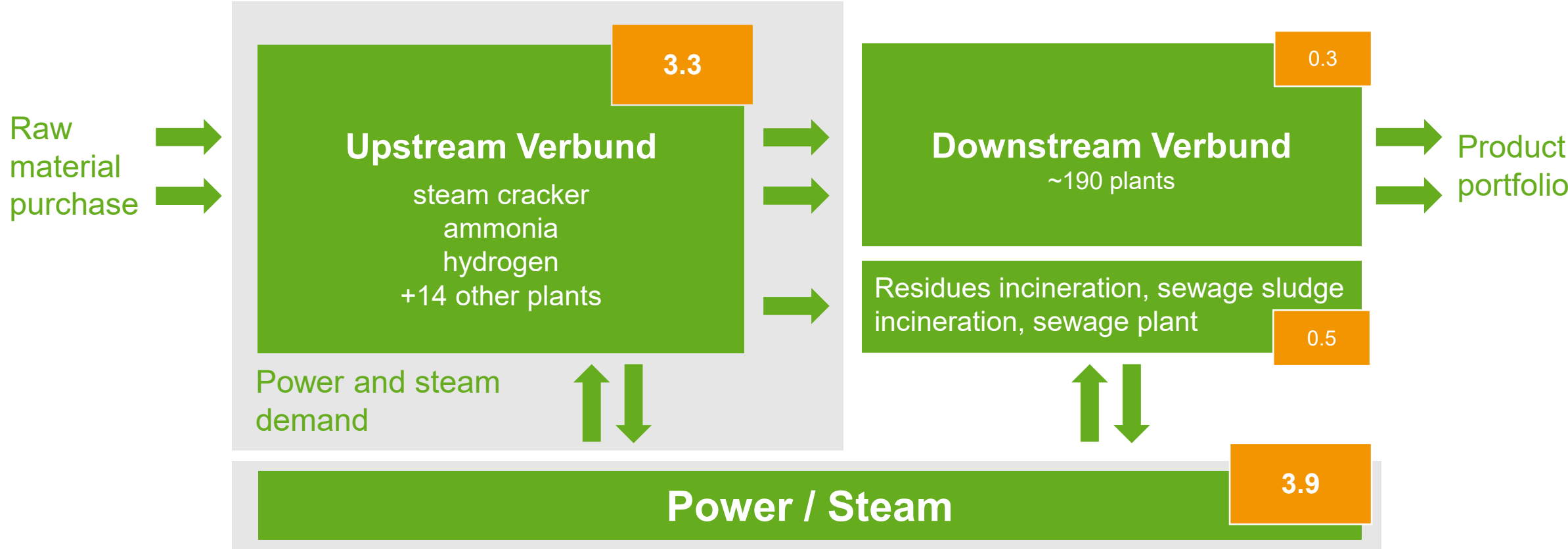
¹ Greenhouse gas emissions of BASF portfolio 2018, including the discontinued oil and gas business

² Accounting for more than half of the CO₂ emissions of the chemical industry in Europe

Example: BASF Verbund site Ludwigshafen

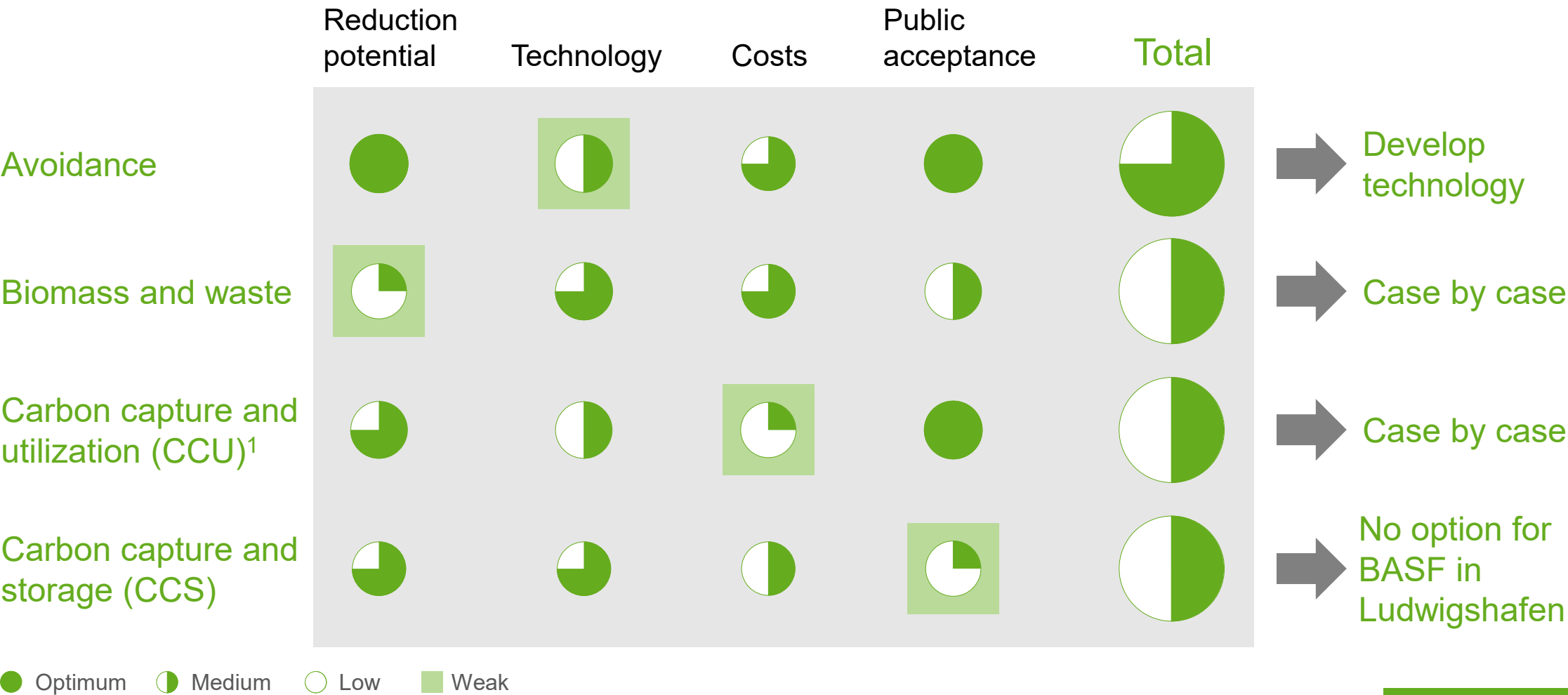
80% of greenhouse gas emissions from power and steam production and basic chemicals production

in million metric tons CO₂e



BASF strategy in carbon management

Avoidance is pivotal, other options are evaluated case by case



Carbon management R&D program

Breakthrough process technologies for key petrochemicals



E-furnace for electrification of steam crackers



Dry reforming of methane for low-CO₂ olefin production



Methane pyrolysis for CO₂-free hydrogen



Sodium acrylate from CO₂ for superabsorbents

We source responsibly

Extend sustainability evaluations and improve sustainability performance in the supply chain



- New goal: Cover 90% of our relevant spend¹ with sustainability evaluations by 2025, and have 80% of our suppliers improve their sustainability performance upon re-evaluation
- Supplier Code of Conduct rooted in internationally recognized standards such as the principles of the UN Global Compact and the International Labor Organization
- Engaged in more than 20 initiatives to improve sustainability performance and working conditions in the supply chain, e.g., Global Battery Alliance (GBA), Responsible Cobalt Initiative (RCI), Roundtable on Sustainable Palm Oil (RSPO)
- Founding member of the “Together for Sustainability” initiative for the joint evaluation of suppliers; 3,767 sustainability assessments and 358 audits carried out by member companies in 2018, thereof 546 assessments and 100 audits by BASF



Global water stewardship

Strong commitment to local water management



- Further increase of water stress areas expected worldwide (climate change, population growth and economic development)
- Growing competition among water users expected (e.g., households, agriculture, industry)
- In 2018, BASF was again awarded with an “A–” leadership grade for sustainable water management from CDP
- New goal: Introduction of sustainable water management at all Verbund sites and sites in water stress areas¹ by 2030

Engaged employees

Proud ambassadors for what BASF stands for



- BASF's employees and their engagement are key to enable our long-term business success
- Our new annual goal: More than 80% of our employees feel that at BASF, they can thrive and perform at their best
- To measure the engagement, we will
 - Collect regular feedback of our employees
 - Engage our employees in discussions on the results
 - Identify improvement areas and drive follow-up activities
 - Report on the current status in the BASF Report
- Global survey “Employee Voices” in 2019: 79% of all participants agreed to the statement that at BASF they can thrive and perform at their best

We create chemistry for a sustainable future

Overview on sustainability goals and KPIs

	New 2025	Old 2020	Status 2018
Procurement			
Sustainability assessment of relevant supply	90% ¹	70% ²	60% ²
Suppliers with improved performance upon re-evaluation	80%	–	–

	Annual		
Employees			
Employees feel that at BASF, they can thrive and perform at their best	>80%	–	–
	2021	2021	2018
Women in leadership positions	22–24%	22–24%	21.7%

	2025	2025	2018
Production			
Process safety incidents ³	≤0.1	≤0.1	0.3
Lost-time injury rate ³	≤0.1	≤0.1	0.3

	Annual	2020	2018
Product stewardship			
Risk assessment of products	Always comply	>99%	91%

	New 2030	Old 2020	Status 2018
Energy & climate protection			
Absolute emissions of CO ₂ equivalents ⁴	No increase	–	22 ⁵
Specific emissions ⁶ of CO ₂ equivalents	Further improvement	–40% ⁷	–34.2% ⁷
Introduction of ISO 50001 energy management system ⁸	90%	90%	73%

	2030	2025	2018
Water			
Sustainable water management at Verbund sites and sites in water stress areas	100% ⁹	100%	50%

	2025	2020	2018
Products & solutions			
Sales generated by “Accelerators” ¹⁰ in product portfolio	€22 billion	28%	27.7% ¹¹

¹ Relevant spend; based on risk matrices, purchasers' assessments and other sources

² Relevant suppliers; based on risk matrices, purchasers' assessments and other sources

³ Per 200,000 working hours including contractor working hours (ICCA)

⁴ Million metric tons; BASF operations excluding the discontinued oil and gas business; includes other gases according to the Greenhouse Gas Protocol, which are converted into CO₂ equivalents

⁵ Greenhouse gas emissions of BASF portfolio 2018, including the discontinued oil and gas business

⁶ Per metric ton of sales products

⁷ Baseline 2002; excluding oil and gas business

⁸ At all relevant sites (primary energy demand, local energy prices)

⁹ Enlarged GRI definition for water stress areas

¹⁰ Products with substantial contribution to sustainability

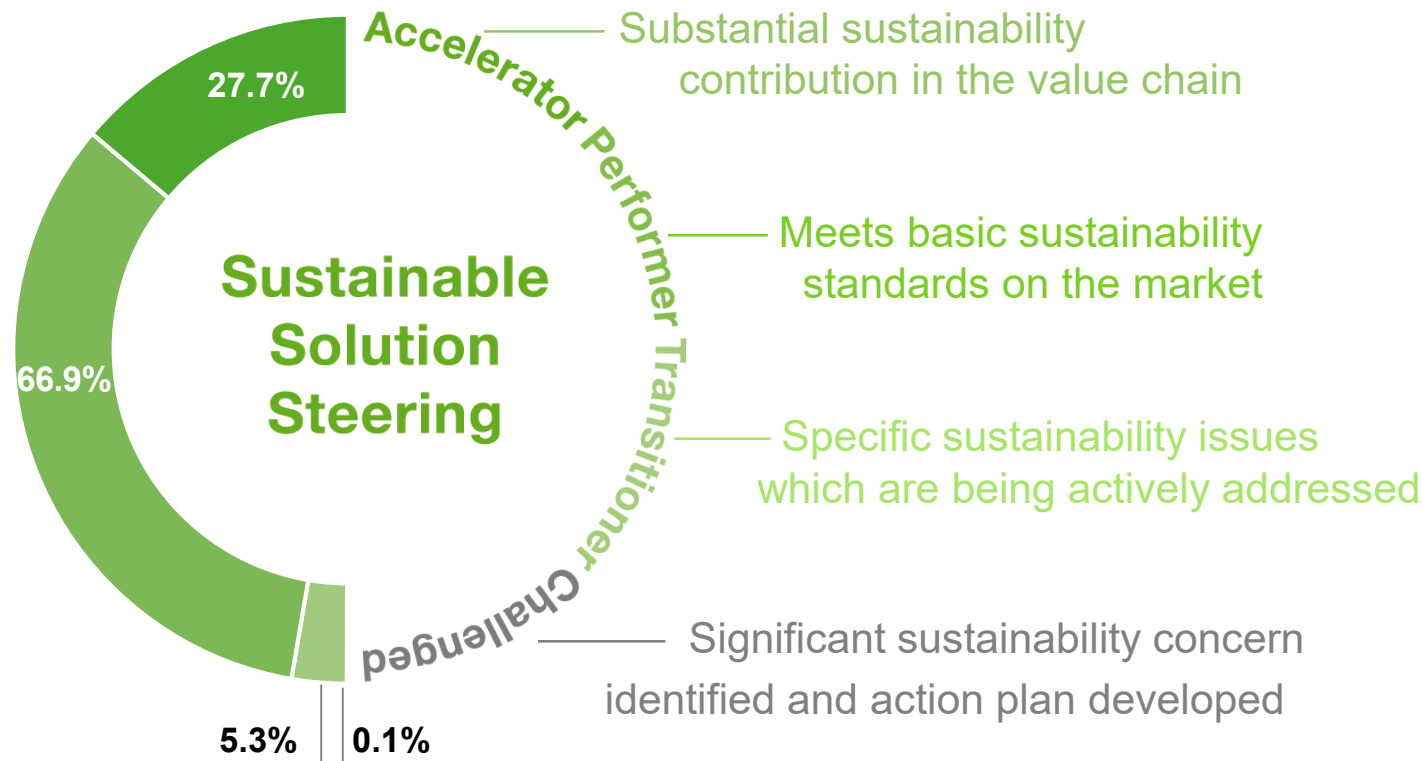
¹¹ Equal to €15 billion

Goal

KPI

Sustainable Solution Steering

Leverage our innovation power to achieve €22 billion in Accelerator sales by 2025



- >60,000 product applications analyzed by 2018 (€56.2 billion in sales, 96.5% of relevant portfolio)
- 27.7% Accelerators
 - >12,000 solutions for enhanced quality of life
 - strong growth in their markets
 - on average margins ~6 percentage points above the rest of assessed portfolio
- Goal: €22 billion of sales with Accelerator products by 2025 (2018: €15 billion)
- Stronger integration in R&D pipeline, business strategies and M&A projects
- We will stop selling Challenged products within maximum five years after classification

BASF's Accelerators contribute to the UN Sustainable Development Goals



Innovations for a sustainable future

Examples with significant contributions to sustainability



SLENTITE® – high-performance insulation material



Formic acid – ecoefficient runway and road deicing



Acronal® MB – from biomass to dispersions



Cetiol® Ultimate – 100% renewable-based emollient for personal care



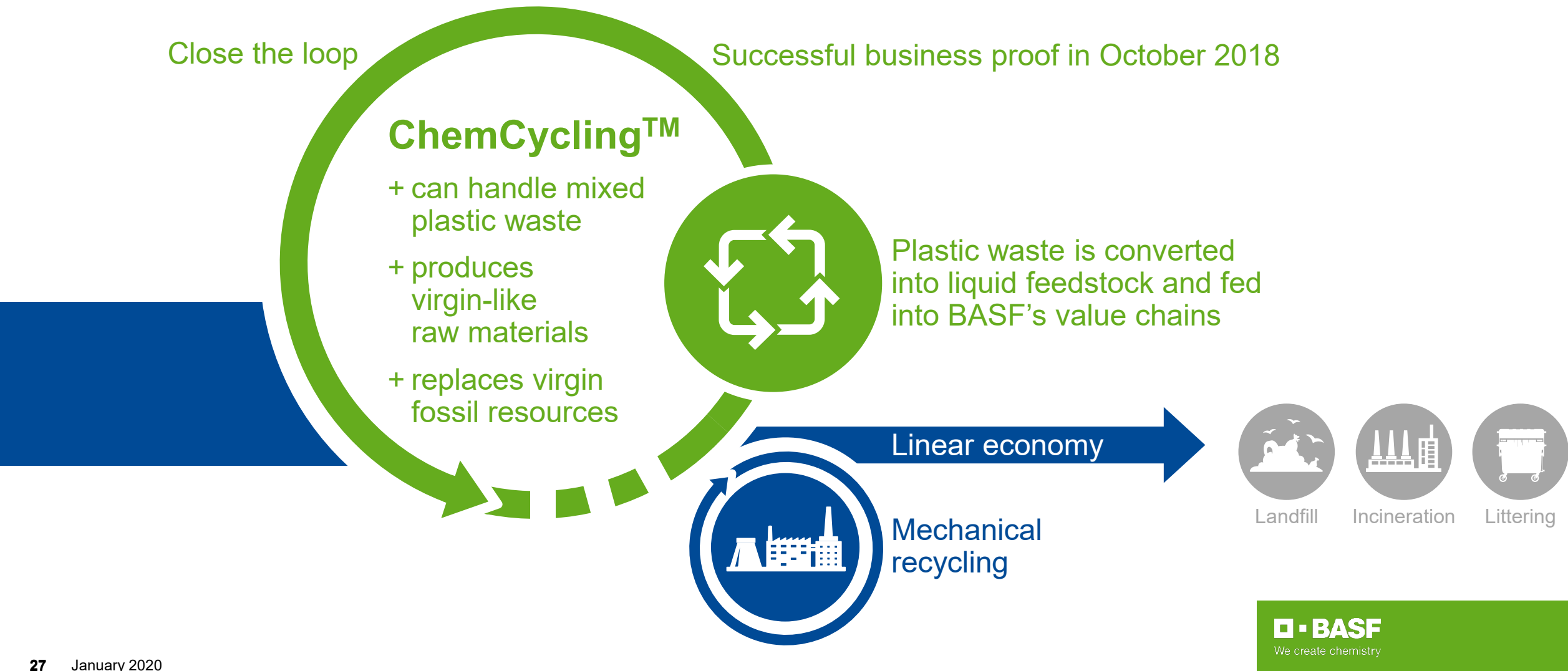
Inscalis® – insecticide with unique mode of action



Synative® ES TMP – biodegradable marine lubricants

Circular economy

Chemical recycling represents a missing link for sustainable growth



Electromobility

Fast-paced buildup of global cathode active materials (CAM) footprint

2018



Second CAM production facility in Battle Creek, Michigan; merged with Elyria, Ohio into BASF TODA America (BTA)

2012



First CAM production facility in Elyria, Ohio

2018



First production volumes at Harjavalta, Finland

2015



Foundation of BASF TODA Battery Materials (BTBM), Japan

2017

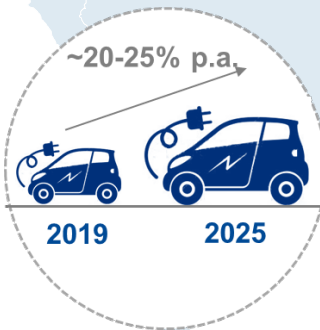


Tripled capacity at BTBM in Onoda, Japan

Europe
planned
greenfield
production

China
planned
greenfield
production

Electromobility
drives battery
materials growth

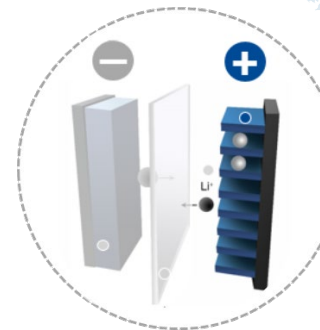


Market projections for 2025:

10-15 million electric vehicles built per year

700-1,000 kt of CAM in electromobility

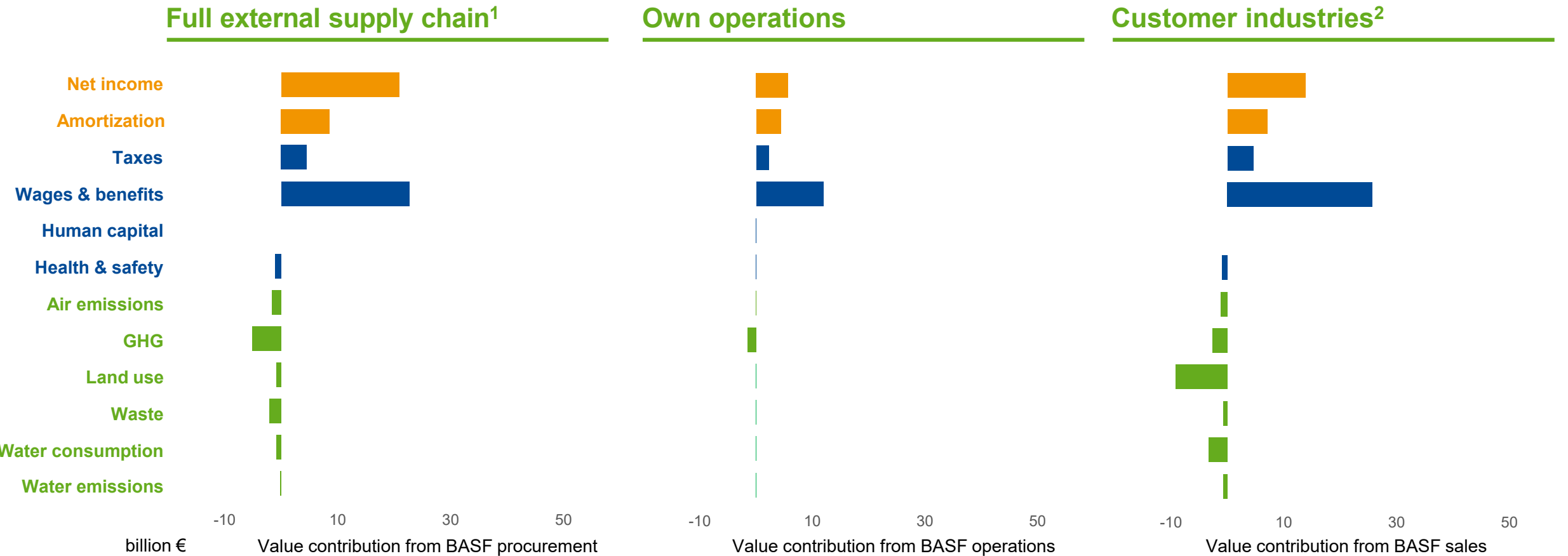
€25-30 billion CAM market size



Chemistry of cathode active materials is key to improve energy density, lifetime and cost

BASF's Value-to-Society 2018

Net positive contribution to sustainable growth in each step of the assessed value chain



¹ Indirect suppliers, direct suppliers
² Customers in industries supplied by BASF

Value balancing alliance

Joining forces for transformation



- Founded in June 2019
- Increase transparency on value creation of companies by
 - standardizing calculations
 - ensuring comparability of results
 - piloting in management accounting
 - making outcomes publicly available
- Ambition: transform business from maximizing profits to optimizing value creation



We create chemistry