

From ESG talk to action

4TH MAY 2022, BARCELONA

SARTORIUS

The societal context for business is changing



Escalating social activism & employee pressure with fierce competition for top talent



Expanding demand for high quality healthcare solutions that promote access at fair prices



Increasing investor pressure and an increase in ESG funds



Mounting sense of urgency resulting in regulatory pressure on emission e.g., EU fit for 55



Rising expectations for a powerful corporate purpose and peer pressure to set ambitious targets

Healthcare must confront major ESG challenges...

100M

People pushed into **extreme poverty** due to health expenses

50%

Of people globally lack access to **essential health services**

2.4Gt
CO₂e

Annual Healthcare **industry emissions**, 4% global total emissions

20%

Average **renewable energy** use across healthcare industry

547B
liters

PharmaCo **water withdrawal**, with ~27% recycled

Source: Healthcare without harm/Arup, Refinitiv ESG database (most recent data available, accessed 18 March 2022), Journal of Cleaner Production, World Bank and World Health Organization

Climate leaders gain competitive advantage

**Easier hiring,
retention**

40 %

of talent seek
sustainability

**Higher
revenues**

+4-25 pp

CAGR of sales
growth for
'green' products

**Save cash
and carbon**

~50 %

of emission re-
duction at net
zero cost in key
sectors

**Lower regu-
latory risks**

+2-12 pp

EBIT margin
after EU Carbon
Border Tax for
companies
abating 55% of
emissions

**Cheaper
financing**

-100 bp

WACC for top
quartile
environmental
performers in
Europe

**Higher
valuation**

>10%

valuation
premium for
top quartile
environmental
performers
globally

The challenge: healthcare produces 2.4GT CO₂e p.a. (4% global total)



Source: Healthcare without harm/Arup (2019); Healthcare without harm/world bank (2017); UK National Health Service (2020); The lancet countdown (2020, 2018); Environmental research letters (2019); Health affairs (2020); BCG analysis

Emissions are categorized into three scopes



Scope 1 Direct emissions

Occur from sources that are owned or controlled by the company

Examples:

- Company owned chemical processes
- Company owned vehicles
- Company owned facilities



Scope 2 Indirect emissions

From generation of energy purchased by the company

Examples:

- Purchased electricity
- Purchased heat



Scope 3 All other emissions

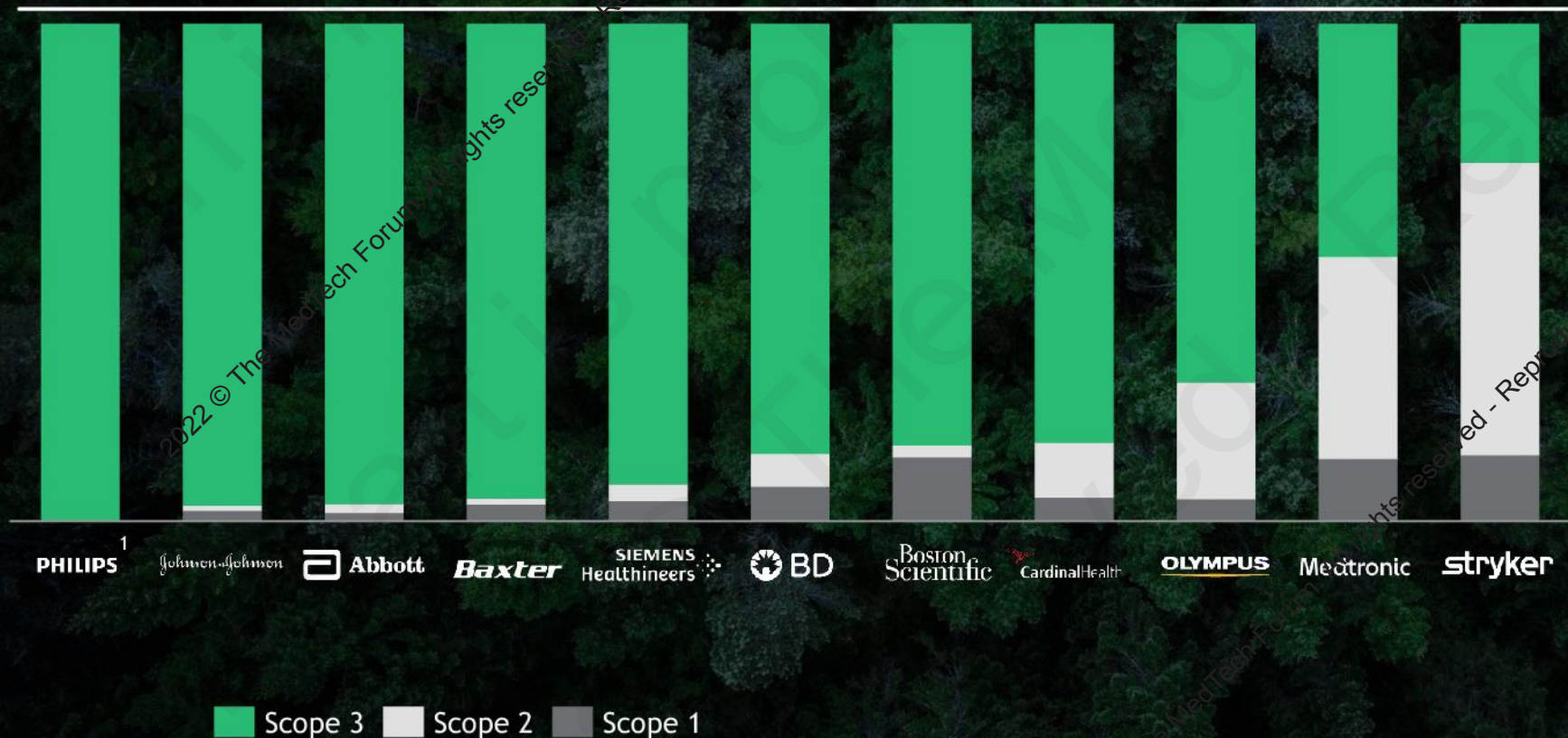
Resulting from activities of the company, but from sources not owned or controlled by the company

Examples:

- Production of purchased materials
- Transportation of purchased fuels/sold products/waste
- Employee business travel
- Product usage
- Product disposal/waste

Scope 3 accounts for 70-95% of emissions

Share of emissions driven by scope 1, 2, and 3 in 2020 (%)



Crucial to work with suppliers on common goals

Commonality across supplier levers can be leveraged

Collaboration will accelerate progress & reduce complexity

Note: 2020 data. Market-based scope 2 emissions data

1. Scope 1 and 2 emissions make up a very small % of Phillips overall emissions footprint

Source: CDP Climate Change questionnaire, Companies 2020 Sustainability Reports, Refinitiv ESG data, BCG analysis

Climate goals described in different ways



Carbon neutral



Climate neutral



Net zero



Climate positive



Climate negative

Impact

Carbon only

All Green House Gases

Mitigation

Abatement, removal, avoidance

Abatement and removal only

Scope

Could apply to scope 1 and 2 only or scope 1, 2 and 3

Timeframe

Annual emissions

Historic emissions

Wide variation in ambition; Pharma ahead of MedTech

ESG Champions

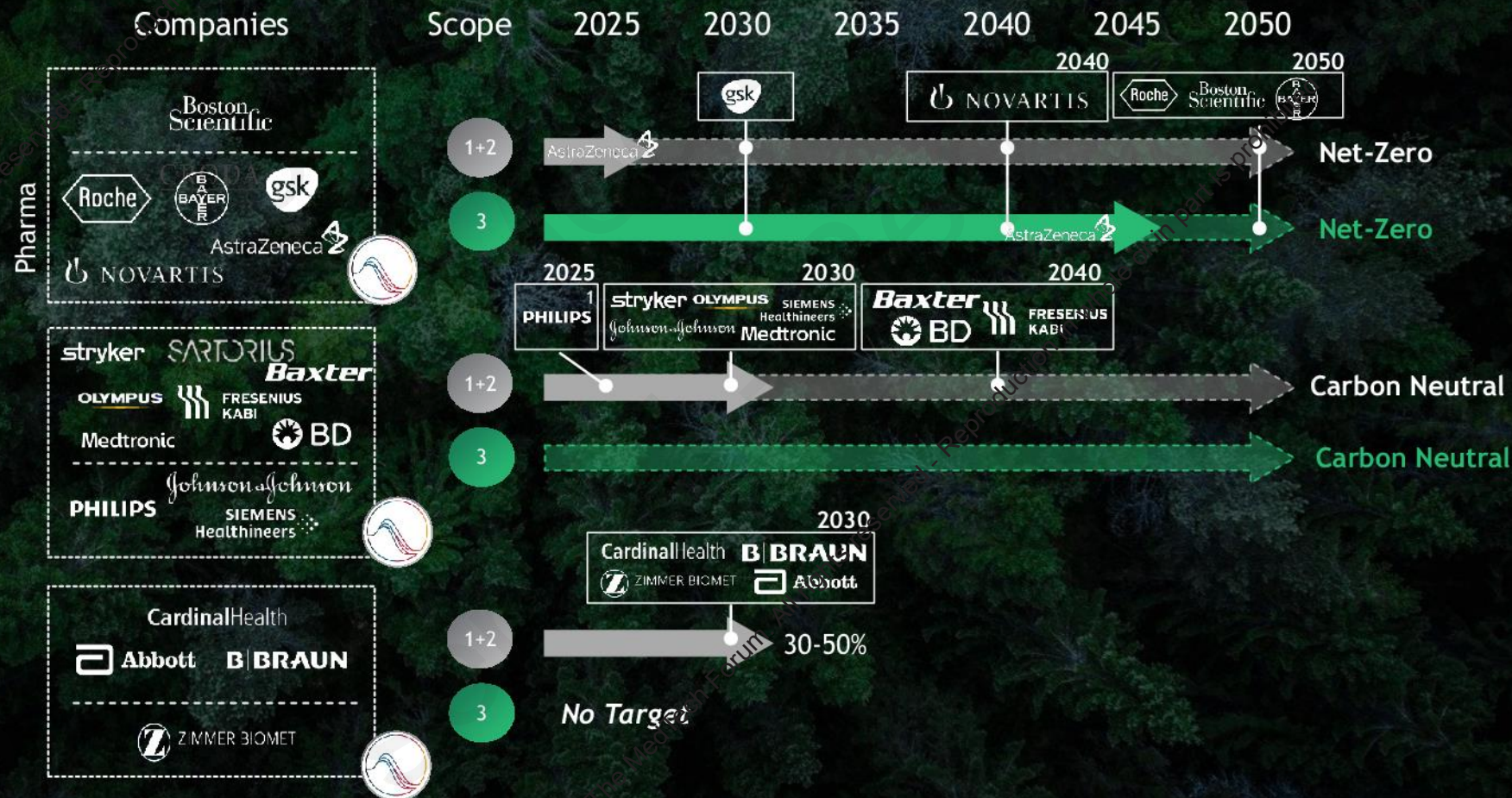
Absolute net-zero target for all scopes and/or science-based target

ESG Experienced

Reduction target for scope 1 and 2 emissions and Net Zero/Carbon Neutral target

ESG Compliant

Only Emission reduction targets for scope 1 and 2



1. In 2020 100% carbon-neutral in operations and sourcing all electricity 100% renewable sources
Source: Company reports; CDP; SBTi; BCG analysis

Common barriers to change

Linkage to value creation of sustainability initiatives is feeble - accepted as costs

Challenging to link Procurement mandate and incentives with sustainability goals

Sustainability initiatives driven in siloes often as an add-on to business initiatives

KPIs piling up creating tension between business priorities and ESG goals

Slow pace due to shifting standards, lack of known solutions, high complexity and Board not fully enlisted

ESG scores iterated with rating agencies vs. ESG story being anchored in Purpose and owned in public markets

Winning in sustainability requires a systems lens to drive holistic change

A few words on Sartorius

- **Manufacturer of bioprocessing equipment** used in production of novel drugs, e.g., mRNA vaccines
- **Fastest growing medtech company** listed on German DAX
- **Key figures:** €3.5B sales, 25% CAGR '17-'21, 34% EBITDA margin

Sustainability considered key CEO priority at Sartorius



Stakeholder demands



Customers



Investors



Regulators



Employees



Value creation opportunity



Differentiated positioning vs. peers



Valuation premium from capital market perspective



Employer of choice with sustainability as one of four core values

ESG strategy defined with core focus on climate

Corporate Strategy

Corporate Sustainability - Group level targets

Holistic Steering and Reporting - frameworks, KPIs, policies

Combine, connect and link financial and non-financial views and metrics into one holistic reporting for steering as well as regulatory and rating requirements

Climate Action

CO₂ footprint, compliance, regulation, carbon trading

Initiatives & Targets

Materials & Circularity

Eco-design of products and packaging, BoL & EoL

Initiatives & Targets

Water & Effluents

Reach/ROCE, water consumption & discharge

Initiatives & Targets

Social Responsibility

Health & safety, labour cond., human rights & diversity in workforce & supply chains

Initiatives & Targets

Governance

Governance, remuneration, anti corruption, compliance

Initiatives & Targets

Focus Areas

Related Divisional Sustainability Tasks

Operating Divisions

Functions & Initiatives

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Climate

Four steps to get from talk to action



1. Create baseline

Created **emission baseline** across scope 1, 2, and 3



2. Identify levers

Identify **abatement levers**, also taking into account levers controlled by suppliers and customers



3. Define targets

Define **ambitious but realistic targets** for high growth company



4. Operationalize

Translate targets and levers into **initiatives with dedicated owners**

Set-up **supporting organizational structure**

Create strong **data backbone**

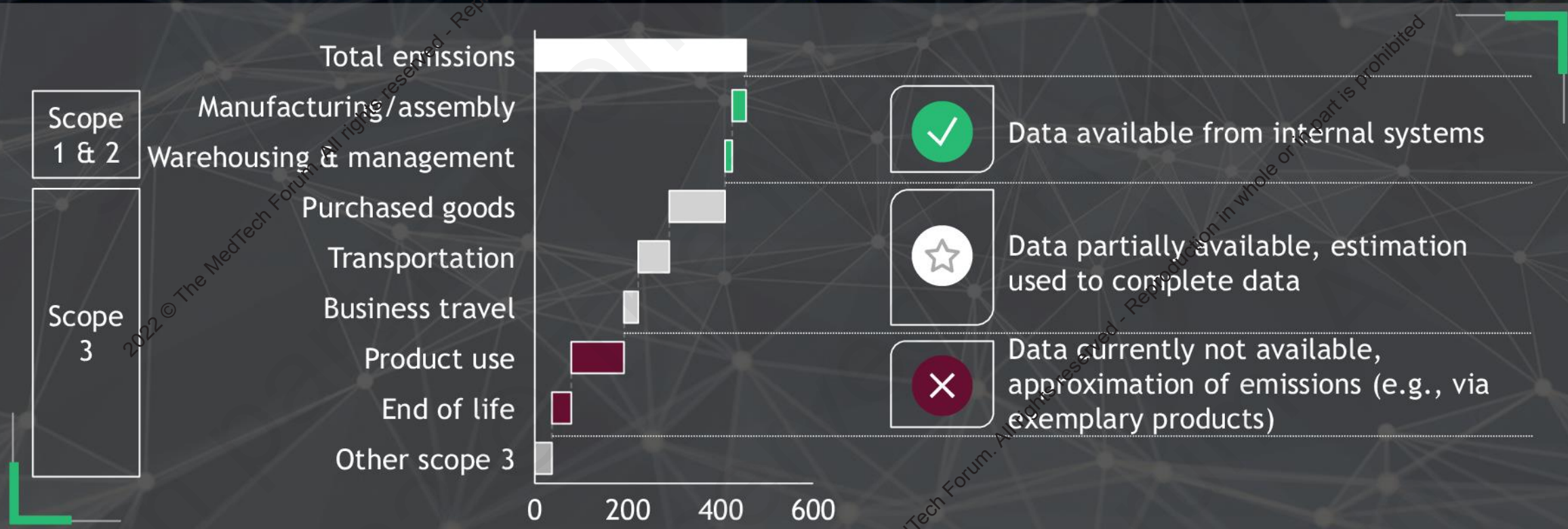
Create baseline | Data availability varies—estimation used to fill gaps



Sartorius emissions 2019 (ktCO₂eq)



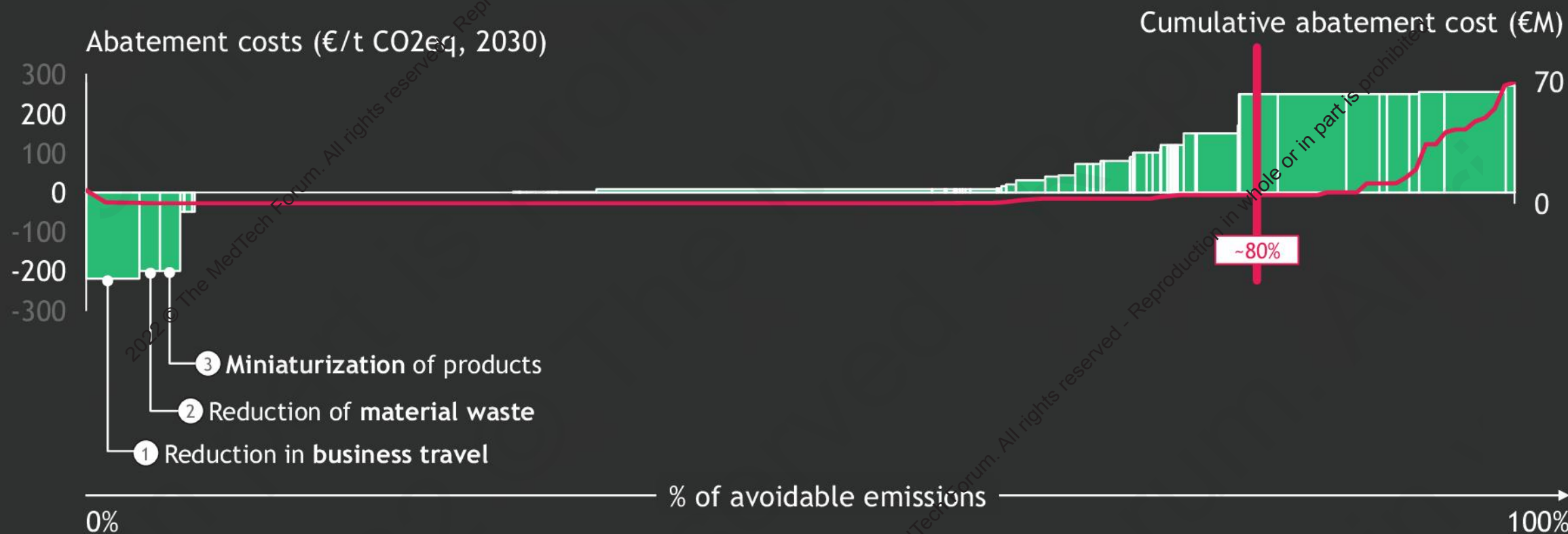
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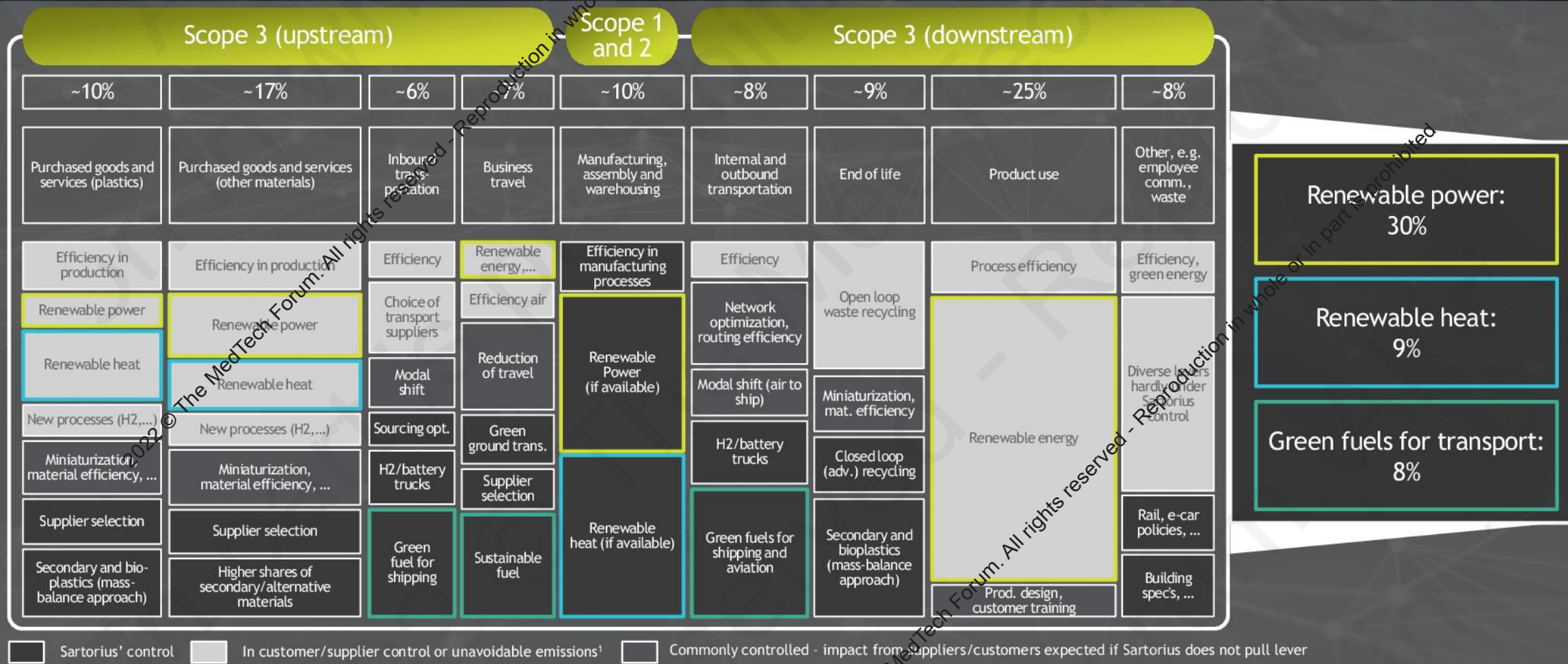
Identify Levers | ~80% of emissions can be avoided at zero cost



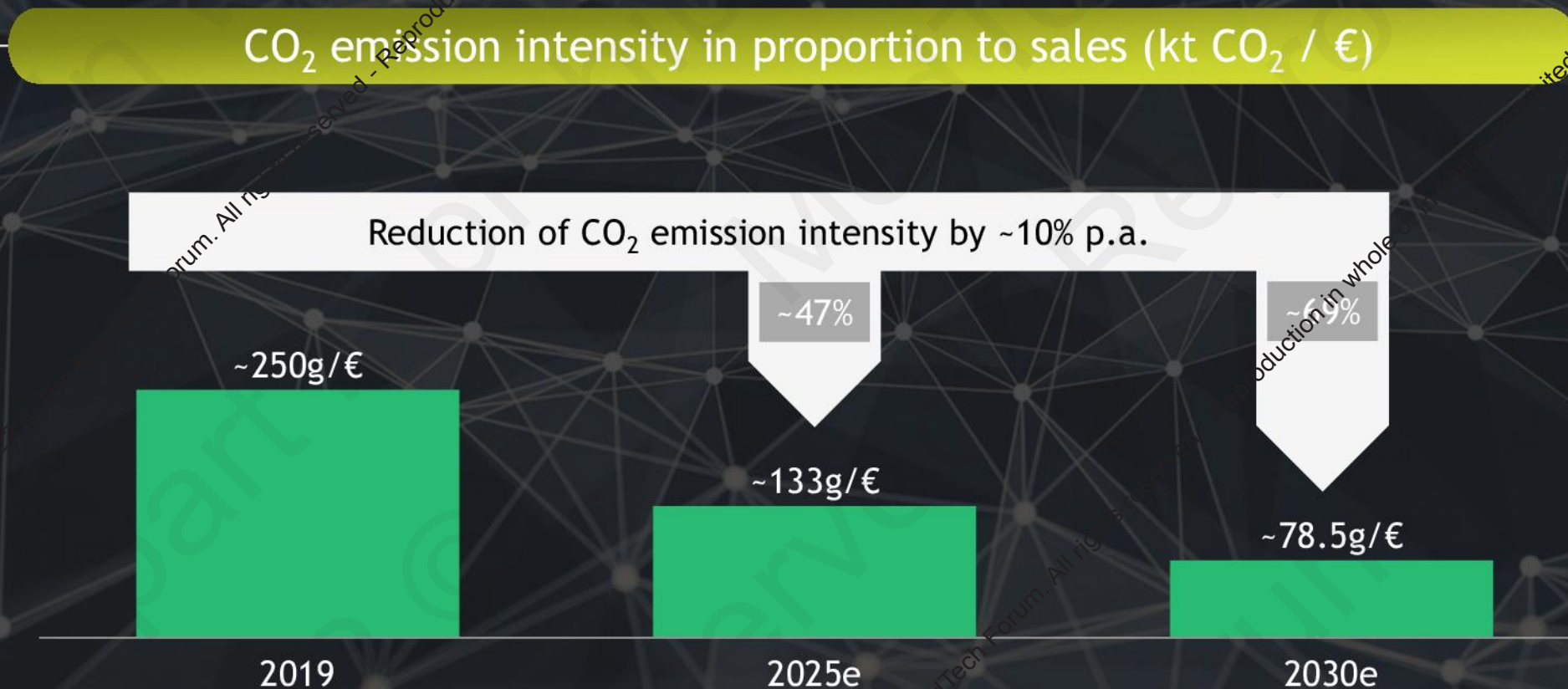
Sartorius abatement curve




Identify levers | ~50% abatement can be achieved with 3 levers



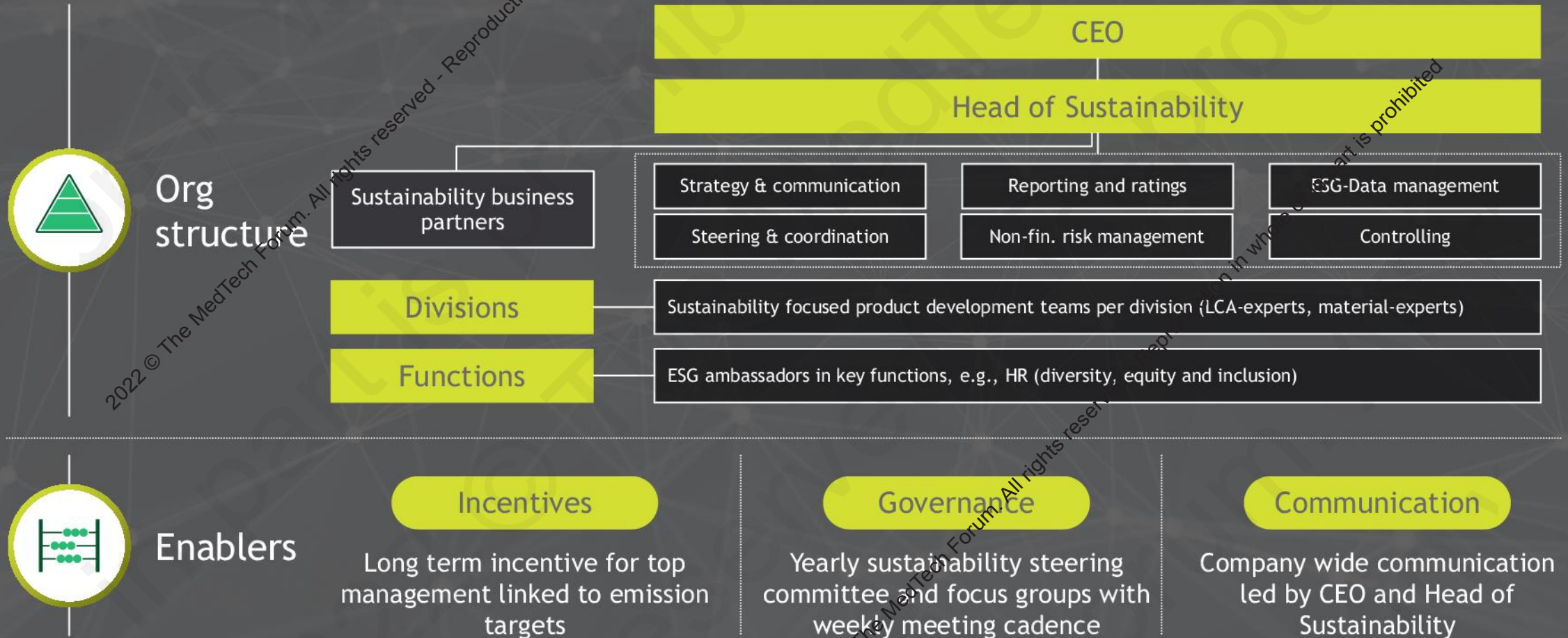
Define targets | Ambitious climate targets to reduce CO₂ emission intensity until 2030



Operationalization | Key initiatives defined to deliver on ambition

Prioritization	Key initiatives	Descriptions
Priority initiatives 123	Renewable energy	Switch to renewable energy where possible
	Procurement	Supplier selection, evaluation & engagement
	Logistics	Route optimization, supplier selection & engagement
Additional initiatives 	Product development	Eco-design and selection of materials
	Business travel	Reduction and sustainable travel
	...	

Operationalization | Sustainability embedded in organization



Recap of key learnings



Get the basics right: Baseline, levers, targets



Detail initiatives, assign owners and set up tracking mechanism



Focus implementation on initiatives with highest impact



Create central ESG team reporting directly to CEO; guide and enable on divisional level and functional level to drive implementation



Create dedicated governance forums for steering and tracking



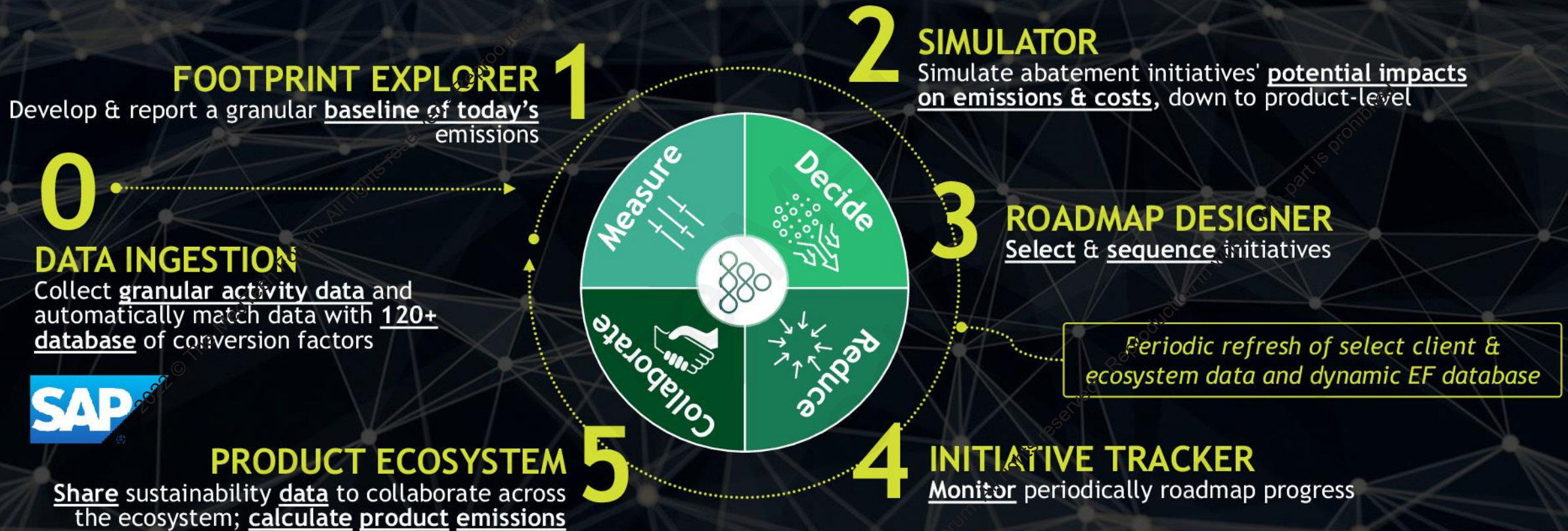
Change context to drive change, e.g. via incentive structure linked to sustainability goals



Setup automated emission tracking to facilitate tracking and reporting



CO2 AI 5 features empower recurring decision-making



Appendix

EU "Fit For 55" incentivizes companies across entire value chain to reduce emissions

- EU Commission unveiled on July 14th 2021 a detailed proposal to **turn climate goals into concrete policy actions**
- Plan is to put proper policies in place to **reduce net emissions by 55% from 1990 levels by 2030** as laid out by the EU Green Deal
- The proposed plan has to be approved by EU member states and the EU parliament—this could **take 2-3 years until adoption**

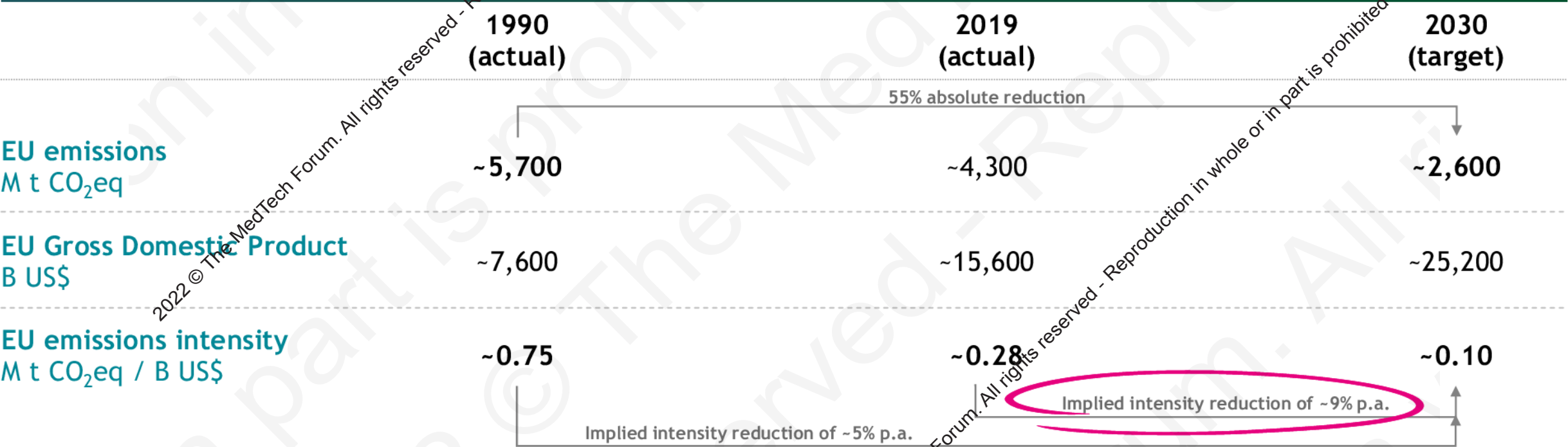
Key policy proposals

- **Raising carbon prices** via existing and new Emission Trading Systems (ETS)
- **Reforming energy taxation** to reflect the environmental impact of fuels
- Introducing a **carbon border tariff for CO2-intensive goods traded into the EU** (e.g., steel & cement)
- **Removal of tax exemption** of traditional aviation fuel

- Sartorius' **suppliers faced with increasing pressure to reduce emissions** – positive impact on impact from suppliers
- Especially **emissions from transport carried out by suppliers & customers** are expected to **decrease** due to incentive to switch to sustainable aviation fuel

EU "Fit for 55" implies 9% p.a. intensity reduction

"Fit for 55": The EU aims to cut emissions by at least 55% by 2030, compared to 1990 levels



Transformation approach is underpinned by 12 key offers

DEFINING AMBITION, STRATEGY, ROADMAP

- 01** ESG strategy **02** Net Zero strategy **03** Environmental/Nature-positive strategy **04** Equitable & inclusive business strategy

MAKING THE CORE SUSTAINABLE

- 05** Sustainable procurement & supply chain
06 Sustainable manufacturing

UNLOCKING VALUE AND IMPACT

- 07** Demand & value capture

BUILDING (NEW) SUSTAINABLE BUSINESSES

- 08** Sustainability portfolio innovation & growth
09 Green ventures

ENABLING THE TRANSFORMATION

- 10** ESG data measurement & disclosure **11** Sustainability partnerships for collective action **12** ESG people & organization



Our Offer | BCG offers support our clients on defining the target end state of your transformation journey

DEFINING AMBITION, STRATEGY, ROADMAP

01 ESG strategy

Define a holistic ESG strategy embedded in the core business, focus on creating competitive advantage

- Conduct materiality assessment to identify ESG topics that matter the most to client, set targets and the ambition, scout for a solution space and define an implementation roadmap based on key initiatives
- Assess current ESG performance based on external ratings and comparable peers, enable rapid ESG score improvement through collaboration with key ESG data and ranking players

02 Net zero strategy

Deep-dive into the client's net zero strategy (CO2 emissions), which is the first building block of the full net zero transformation

- A granular baselining supported by BCG proprietary tools will help in measuring carbon footprint and identifying strengths and gaps in the Net Zero strategy
- Set ambitious and robust targets, and define a high-level roadmap to fulfill the ambition with business model and supporting business cases

03 Environmental/Nature-positive strategy

Support clients holistically on their value chain's footprint and dependency on the Environment

- Apply a cutting-edge approach to identifying and prioritizing risk reduction and business opportunities, supported by innovative methodology in close collaboration with SP7N
- Develop a tailored circular economy strategy, leveraging digital solutions such as CIRCelligence (by BCG) to analyze the complete value chain and overarching business dimensions

04 Equitable & inclusive business strategy

Provide a proven approach with a unique focus on leveraging Diversity, Equity & Inclusion as a source of value creation

- Consider both internally for employees, but also externally across customer segments by providing them equitable and inclusive access to products and services
- Cover every project phase from target setting to execution and governance



Our Offer | We help operationalize our clients journey by making the core sustainable & building new ventures

MAKING THE CORE SUSTAINABLE

05 Sustainable procurement & supply chain

Support clients drive ESG E2E in procurement & supply chain operations

- Heavily integrate Scope 1-2-3 emission norms by setting up the right governance structure, creating transparency, setting the right baseline and targets and by leveraging BCG's proprietary tools such as sustainable sourcing accelerator and CO2.AI
- Help companies fulfill their due diligence obligations in their supply chains with regards to respecting human rights & carbon emission policies

06 Sustainable manufacturing

Help clients with a holistic approach to sustainable manufacturing: starting from identification of emissions, to definition of specific measures (incl. conventional and tech levers), target picture and implemented solutions

- Consider financial implications including clear understanding of which abatement can be achieved, ideally at net zero cost
- We offer best-in-class sustainable manufacturing tools

UNLOCKING VALUE AND IMPACT

08 Sustainable portfolio innovation & growth

Help clients transform not only how they operate, but what they do as a business

- Assess environmental and social content of current portfolio, shift and / or expand it towards more sustainable products and services
- Develop new businesses centered around sustainable solutions
- Build capabilities to constantly innovate products and business models towards more Sustainable businesses

09 Green Ventures

We build, scale and invest into businesses and technologies that enable a 1.5°C world and transform industries in partnership with corporations, investors and entrepreneurs, thus accelerating the net zero transition

- We have differentiated commercial offers for corporates, VCs and start-ups



Our Offer | Capturing value and measuring impact is key to transform our clients' companies holistically

BUILDING (NEW) SUSTAINABLE BUSINESSES

7 Demand & value capture

Help clients capture business value from their Sustainability transformation: topline (market expansion, new customer segments), bottom line (operational cost efficiencies, lower cost of capital), mitigated risks, enhanced market valuations, but also intangible assets like stronger employee attraction and retention

- Size the value potential: for each business segment, identify priority value levers, assess feasibility, and size the potential prize, estimate cost of sustainability changes
- Capture the value: pilot a sustainability and value tracking method to then measure, learn and refine before rolling out the solution
- Build and embed capabilities: establish agile value engine team and mechanisms, and build sustainability value capture expertise across marketing, pricing, product and investor relations



Our Offer | We help build the enablers that support our clients' E2E transformation journeys

ENABLING THE TRANSFORMATION

10 ESG data, measurement, & disclosure

One-stop-shop for analytics & data capabilities (including data sourcing strategy) to accelerate and enable an ambitious sustainability transformation, with the ability to

- Leverage BCG tailor-made data & analytics solutions to answer the short-term needs of our clients (such as ESG score optimization)
- Quickly build data and analytics capabilities (tech infrastructure, data governance, reporting platform) to track Sustainability commitments and steer operationalization at group and BU level

11 Sustainability partnerships for collective action

End to end offer to assess, set-up alliances, defining collaboration strategy, improving their efficiency, strengthening governance to accelerate delivery of sustainability targets

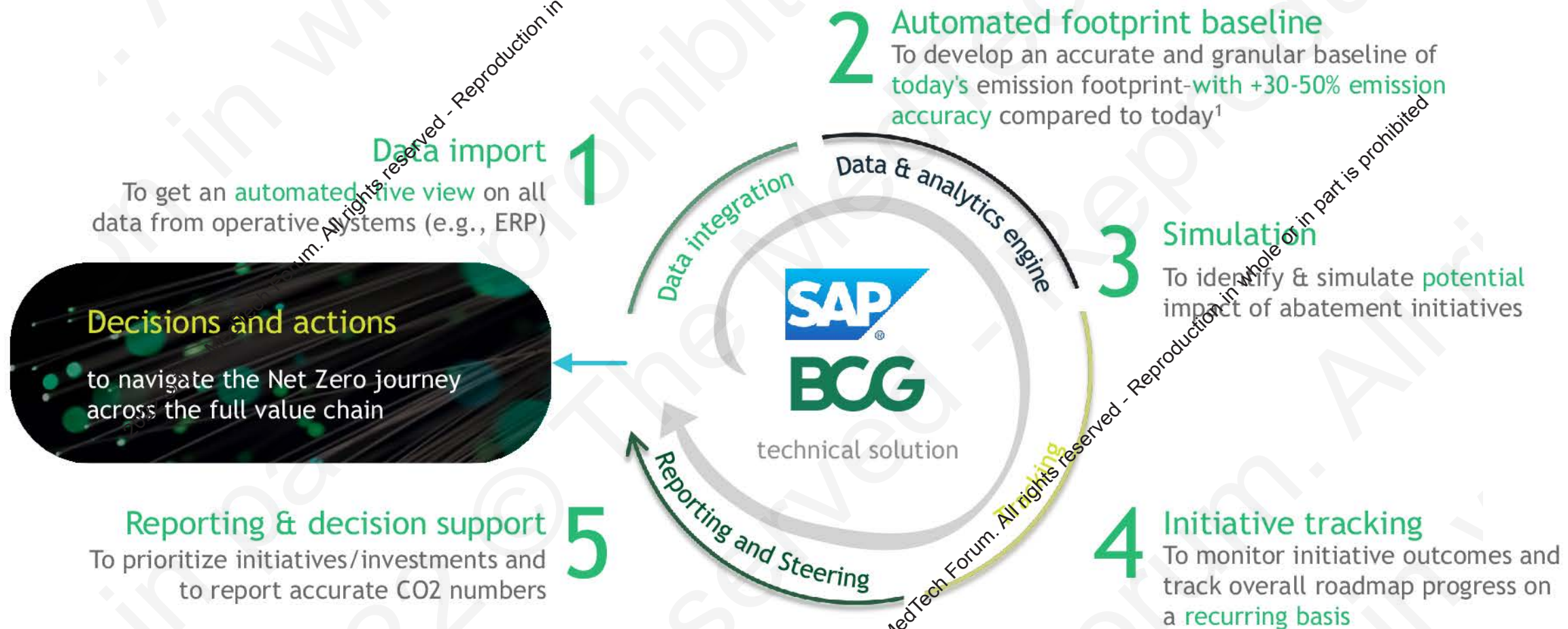
- Help corporates and existing sustainability partnerships navigate complex ecosystem and optimize their participation in multi-stakeholder initiatives to maximize impact

12 ESG people and organization

Anchor Sustainability across all dimensions of the organization: leadership, performance management, processes, governance and culture, to successfully deliver on our clients' Sustainability agenda and make it authentic and real for our clients' people

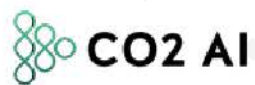
- Define and implement the relevant organization set-up to, incentives & governance mechanisms
- Build ESG expertise at speed and at scale in the organization through a Build-Operate-Transfer (BOT) approach

Deep Dive ESG Data | Data SAP x BCG solution enables transparency and tracking building on complementary strengths



1. 30-50% adjustment vs. traditional methods, based on BCG experience to date on scope 3 for CPG
Public APIs from PFM, SCT to support the integration between BCG and SAP solutions

Deep Dive ESG Data | SAP x BCG approach delivers best-in-class baselines and transparency on emissions



CO2 AI as digital speed boat for fast emissions impact



World's most comprehensive sustainability data base



Continuous AI-based learning and optimization



Automated mapping of Sartorius data



Embed Sustainability in your Enterprise and across Value Chains



Product footprints at scale for disclosure and internal product optimization with SAP PFM¹



Steering and reporting across your sustainability ambitions with SAP SCT²



Deep integration into industry and supplier ecosystem



Supplier ecosystem solution in partnership with CDP



Methodology and data standardization with WBCSD Carbon Transparency Pathfinder Framework

Leading MedTech players generally perform well across ESG ratings

Benchmark approach & description:

Inside-out

Measures relative ESG performance across key issues based on several hundred quantitative and qualitative data points



Scores (0-100, 100=best)



Scores (0-10, 10=best)



Scores (0-100, 100=best)

Outside-in

Aggregating multiple public & private ESG scores from >700 sources

AI-based NLP algorithm to assess ESG sentiment across public data on material issues (SASB)



Insight score (0-100, 100=best)
Momentum (12mths trailing)

Rating scale		E	S	G		E	S	G		E	Empl.	Comm.	G	Insight	Momentum
J&J	A	93	97	76	BBB	6.3	5.4	2.4		75	66	61	55	37	Positive
Philips	A	81	95	83	BB	10.0	4.7	5.4		72	62	59	57	55	Positive
Olympus	A-	78	89	77	BB	10.0	3.2	7.1		75	56	57	52	59	Positive
Baxter	A-	76	82	84	A	10.0	6.2	4.8		71	71	64	60	59	Positive
Croda	A-	92	77	69	AAA	7.4	6.6	6.7		69	64	60	57	75	Positive
Boston Scientific	A-	61	90	78	BB	10.0	4.4	4.5		70	64	58	56	56	Positive
Novozymes	A-	83	79	67						69	62	61	55	69	Positive
Stryker	A-	61	78	84						56	58	50	52	61	Positive
Siemens Healthineers	A-	71	79	76						52	51	52	46	64	Positive
BD	B+	77	87	52						73	63	59	58	44	Positive
Abbott	B+	77	89	44						72	68	62	57	47	Positive
Cardinal Health	B+	57	65	86						65	60	55	57	26	Positive
Medtronic	B	78	89	21						72	66	62	57	53	Positive
Livanova	C+	0	45	77						50	49	47	50	38	Negative

Note: Peers sorted according to Refinitiv score; MSCI ESG data for leading five peers
Source: Refinitiv, MSCI ESG, CSRHUB, TVL - all data extracted 2March22

Positive Negative

How to become an ESG Champion in MedTech

DEFINING AMBITION, STRATEGY, ROADMAP

Identifying ESG topics based on company and industry context, and developing end-to-end ESG strategies that are anchored in purpose, set specific targets (net-zero) and provide actionable roadmaps

MAKING THE CORE SUSTAINABLE

Transforming how businesses operate to deliver enhanced social and environmental impact and achieve greater resilience

UNLOCKING VALUE AND IMPACT

Capturing value through translating sustainable activity into enhanced business outcomes

BUILDING (NEW) SUSTAINABLE BUSINESSES

Embedding sustainability in what businesses do through portfolio shift, business model innovation or new business build

INTEGRATE ANALYTICS & DATA

Acceleration and enablement an ambitious sustainability transformation with analytics & data capabilities

SUSTAINABILITY PARTNERSHIPS

Assessing end-to-end offers to set-up alliances and define collaboration strategies

ESG PEOPLE AND ORGANIZATION

Ensuring authentic leadership on sustainability, while maximizing impact creation through the organization

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