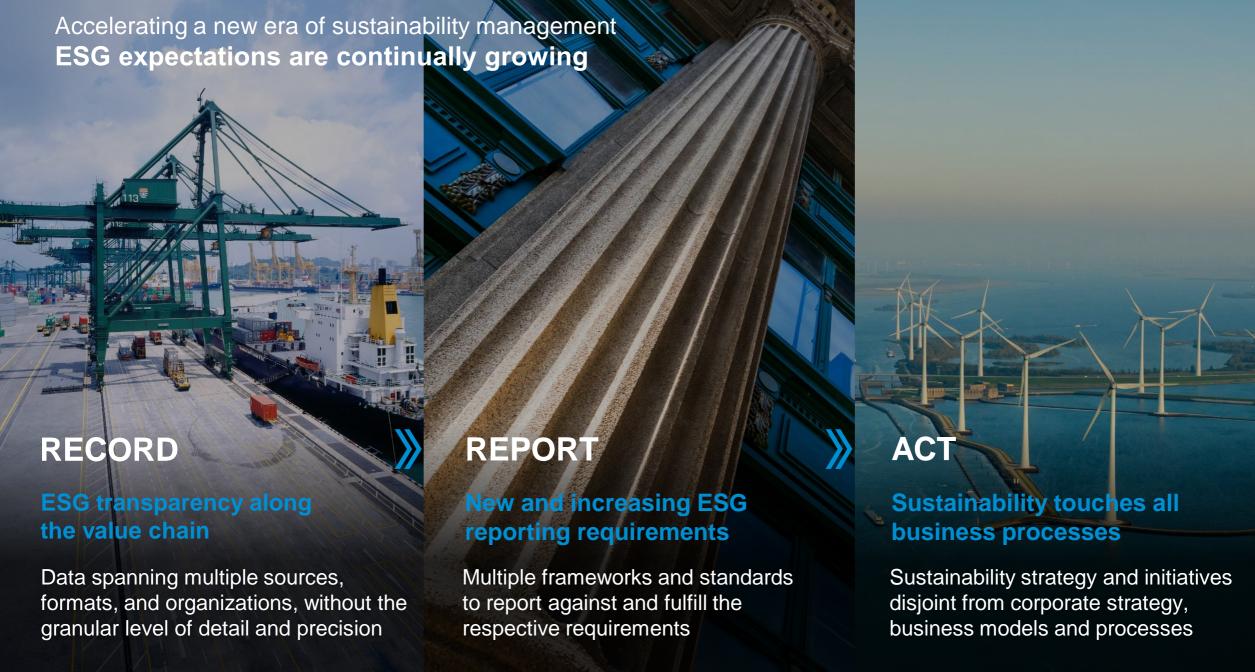


Week 1: The Corporate Sustainability Journey

Unit 1: Accelerating a New Era of Sustainability Management







Accelerating a new era of sustainability management

ESG transparency is the first step in solving these challenges



RECORD

Move from averages to actuals with data across the value chain

88% of the world's supply chains networked through SAP

REPORT

Incorporate relevant frameworks with built-in audit & assurance

>600 ESG frameworks & standards simplified on extensible data foundation

ACT

Embed sustainability into your business DNA

50 years of market leadership in enterprise processes & applications

Thank you.

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Week 1: The Corporate Sustainability Journey

Unit 2: Profit and Sustainability





Sustainable Business Strategy instead of a Sustainability Strategy



Establish a sustainability business strategy

When you empower your entire business to contribute to sustainability, it becomes a top strategic priority with measurable results.

Embed sustainability data into processes

By inserting sustainability data in your business processes, you can make sustainable and profitable decisions and measure performance.

Manage carbon and climate exposure

Accounting for and managing climate-related emissions across all parts of your value chain can help reduce financial and reputational risks.

Embrace circular economies and waste fewer resources

Efforts to avoid, reduce, reuse, recycle, and reclaim materials can help you minimize waste and adopt circular economy processes faster.

Prioritize people across your value chain

A diverse, respected, and nurtured workforce is a more agile and productive workforce that supports your bottom line and sustainable processes.

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Week 1: The Corporate Sustainability Journey

Unit 3: Holistic Steering and Reporting





Companies need to act on sustainability now

Sustainability is more relevant than ever...

Customers

79%

of buyers are changing preferences based on sustainability

Investors

50%

of all professionally managed assets will be ESGmandated by 2024 Employees

90%

of employees indicated that a company's ESG efforts enhance job satisfaction

Companies

70%

of EBITDA could be at stake from sustainability challenges

...and is becoming a license to operate.









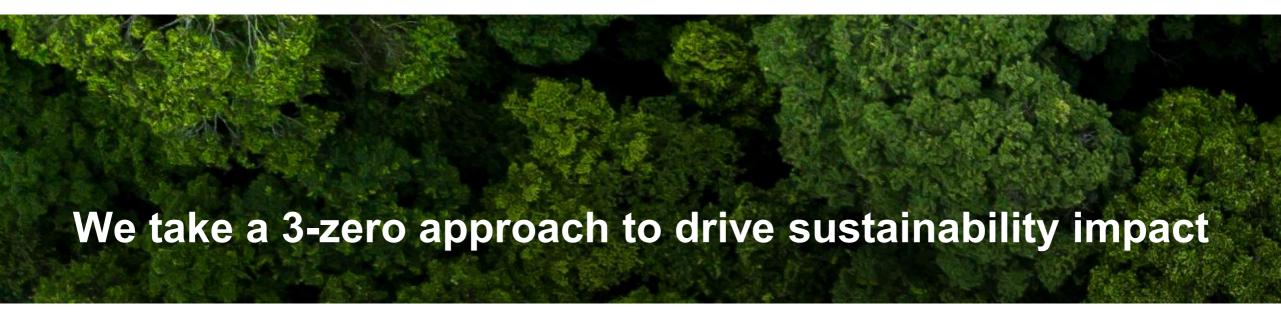






2

SAP aspires to a world with zero emissions, zero waste, and zero inequality.



Holistic Steering and Reporting

Zero Emissionswith Climate Action

Zero Waste with Circular Economy

Zero Inequality with Social Responsibility

Holistic steering and reporting

Challenges with data availability and quality

Create the right Data Foundation

Regulations and your own targets

Data from enterprise apps where possible

Record and calculate new data types

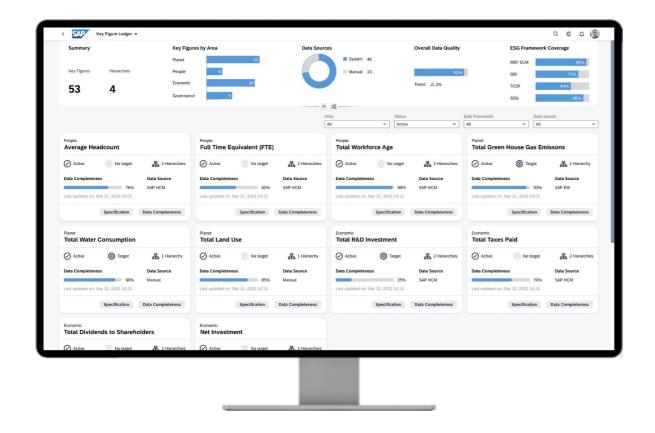
Recurrence, automation and traceability

More common metrics over time



Holistic steering and reporting

Integrate ESG performance for strategic decision-making and comply with regulatory reporting



Record: Actuals instead of averages

Measure ESG factors with out-of-the-box integration with SAP systems for faster time to value and granular data visibility based on actual data, not averages

Report: Audit-ready ESG metrics

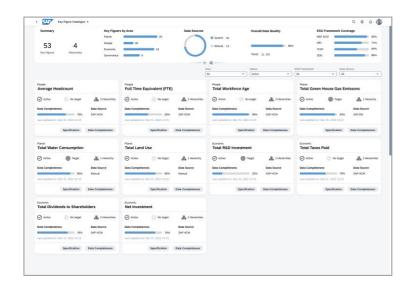
Report regulation-compliant ESG metrics covering common frameworks (such as GRI) based on an open and extensible solution with the largest ESG ecosystem

Act: ESG-embedded business processes

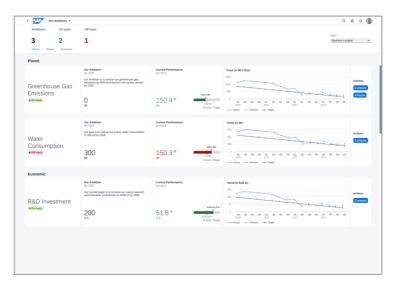
Act by planning your future with actionable insights, forecasts, and targets, as well as tracking initiatives and changing business processes

Sustainability reporting applications

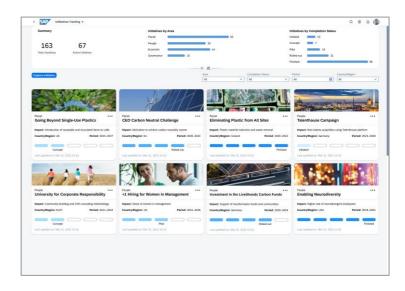
Manage sustainability data assets



Monitor strategic sustainability KPIs



Track sustainability actions and initiatives



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Week 1: The Corporate Sustainability Journey

Unit 4: How to Maximize Positive Impact and Profitability Through Sustainability





How to build an effective sustainability strategy

- 1. Identify material ESG issues for the business (that have an impact on the business and on which the business has an impact).
- 2. Identify the key stakeholders for the business, their weighting of what is material (which may differ from the business weighting), and how you might engage with them.
- 3. Develop a materiality matrix to help prioritize.
- 4. Develop sustainability strategies, goals, and targets.
- 5. Develop the business case for the proposed strategies and investments.
- Determine the reporting and disclosure metrics and approach.
- 7. Operationalize the strategy (governance, structure, incentives, and so on).



Focusing on material ESG issues improves financial performance

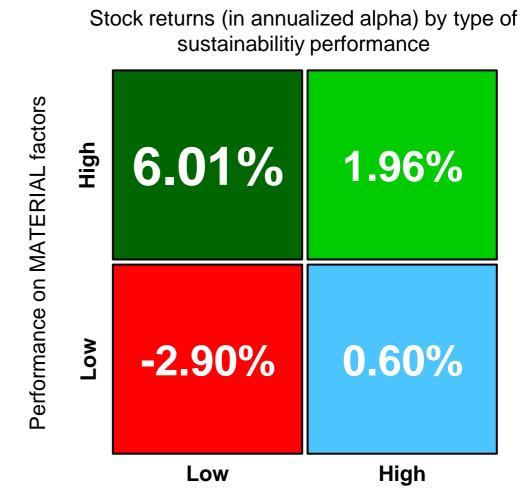
Firms managing for material ESG issues outperformed by 6%

Firms managing for all ESG issues performed less well at 2%

Firms managing for immaterial ESG issues (0.6%)

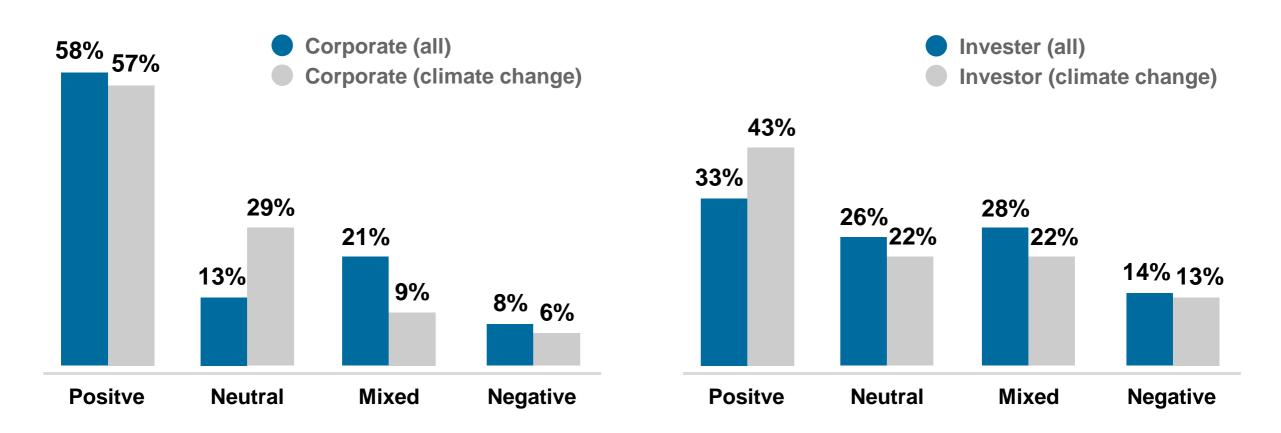
Khan et al 2015: Calendar time portfolio stock returns for 2300 firms (1991-2014)

Materiality standard: SASB material metrics



Performance on IMMATERIAL factors

NYU Stern CSB analysis of 1200+ ESG/ financial performance studies (2015-2020)



Positive and/or neutral results for investing in sustainability dominate. Very few studies found a negative correlation between ESG and financial performance (based on 245 studies published between 2016 and 2020).

Sustainability is the next wave of total quality management

NYU Stern CSB Return on Sustainability Investment (ROSI™) Framework

Sustainability Drivers of Financial Performance and Competitive Advantage

When a company embeds sustainability in its strategy and practice, it...

Improves:

Customer Loyalty

Employee Relations

Innovation

Media Coverage

Operational Efficiency

Risk Management

Sales & Marketing

Supplier Relations

Stakeholder Engagement

Drives:

Great Profitability

Higher Corporate Valuation

Lower Cost of Capital

Delivers:

Short- and Long-Term Value Creation for Shareholders and Society

ROSI methodology and collaboration process

1

Identify Material ESG Issues and Strategies

Identify material sustainability challenges, (referencing frameworks such as SASB and GRI) and how the business is addressing associated risks and/or opportunities

2

Assess Practices

Determine which practices have been or may be implemented to address sustainability strategies

3

Define Benefits

Define the types of economic benefits that could be expected from the changed practices through the ROSI mediating factors

4

Quantify Benefits

Estimate the magnitude of those benefits and when they could be realized

5

Monetize

Translate the benefits into economic value, stress test, and then forecast ROI

NYU Stern CSB identified 18 sustainability strategies for automotive

Strategies Identified Key ROSI Drivers

Reduce Resource Consumption	
Improve Waste Management	Operating Performance (includes
Reduce Carbon Emissions	Operating Efficiency, Improved Sales
Reduce VOC Emissions	and Marketing, and Better Media
Recycle And Recover From End-Of-Life Products	

Risk Reduction

Minimize Downtime In Regions Prone To Natural Disasters, Water Scarcity, Etc.

Avoid Use Of Conflict Minerals

Improve Safety

Improve Governance Around Sustainbility

Use Renewable Energy

Incorporate more sustainable materials or design into the product

Engage Cosumers With Sustainability Through Innovative Services

Increase Fuel Efficient Product Presence Innovate to Provide Long-Term Improved Sustainability Technology Innovation Increase Sustainable Product Presence

Engage Employees In Quality Of Worklife Stakeholder Engagement (Includes Engage Suppliers On Specific Sustainability Matters (Improve Ecosystem) Better Supplier and Employee Improve Talent Acquisition, Employee Retention, And Productivity Relations and Customer Loyalty)

Financial benefits of sustainability (illustrative subset)

Sustainable Strategies

- Reduce resource consumption
- Improve waste management
- Improve employee relations
- Innovate to provide long-term improved sustainable technologies

Sustainable Practices

- Implementing new water filtration system
- Recycling paint and solvents
- Implementing ergonomic changes to the production line
- Producing more electric vehicles

Benefits

- Reduced costs for water, energy
- Reduced costs for wastewater and toxic waste disposal
- Reduced costs for paint, solvents
- Revenue for recycled materials
- Higher productivity, increased worker safety
- New revenue from innovative products

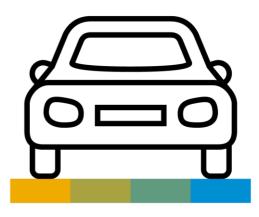
ROSI findings

Automotive sustainability strategies drive:

- Higher operational efficiencies
- Risk reduction
- Innovation and growth

Contributing substantial tangible financial benefits

Can improve earnings up to 3.7% of revenue



Operating performance strategies and ROSI

Strategies	Benefits	Mediating factor	Monetization methods	
Reduce Resource Consumption	Reduced electricity or water cost	Higher operational efficiency	The reduced per unit cost of energy or water on current year production. Subtract any costs to achieve the benefit for operating income impact. Calculate NPV assuming 5 year forecast of net operating income benefits and upfront investments.	
Improved Waste Management	Revenue from selling recycled materials	Improved sales and marketing	Average selling price per ton of solid wast on amount sold less the cost to recover (calculated as \$ per ton) less cost per ton to recycle.	
	Saving from using recovered waste	Higher operational	Saving from using less virgin material and lower disposal costs associated with the recovery and reuse solid materials (weighted average per price per metric ton).	
	Saving from using recycled water		Savings from reduced spend on fresh water due to using recycled water net of costs to recycle plus the savings unless waste water disposal cost using average disposal price per M3.	
	Cost avoided from traditional waste disposal		Per unit disposal cost per ton of waste to the amount of material recovered/reused or recycled.	
	Energy savings in manufacturing		Energy savings by comparing the weighted average energy intensity per ton using virgin material to the energy intensity using recovered/recycled material.	
Reduce Emissions – Carbon	Savings from reduced need for carbon credits	Higher operational efficiency	Reduced spend on carbon credits due to the reduction in emissions in manufacturing subtract costs incurred to achieve the reduction for net operating income benefit.	

Innovation strategies and ROSI

Strategies	Benefits	Mediating factor	Monetization methods
Increase sustainable Product Presence	Incremental sales from new sustainable products	Improved sales and marketing	Incremental sales from the number of zero emission and low emission models sold using the weighted average price per unit. Incremental margin on zero emission and low emission vehicles sold assuming an average cost of goods sold (COGS).
Innovate to Provide Long-term Improved Sustainability Technologies	Increased pricing on products with enhanced sustainability features	More innovation	Differential in average price per vehicle with and without innovative sustainability features minus the sales weighted average COGS of sustainability features, and multiplied by the number of non-zero and low emission vehicles sold that include the added sustainability features.
Engage Consumers with Sustainability through Innovate Services	New revenue streams	Improved sales and marketing	Annual revenue stream from sustainable services (e.g. car sharing, in-vehicle security or emergency services) less wages and other SG&A costs associated with the services.
Incorporate More Sustainable Materials into Product Design	Saving from substituting materials in product design (i.e. recycled and renewable materials)	Higher operational efficiency	Raw material purchased that is renewable/ recycled/ lightweight materials in tons multiplied by the differential in weighted average price of traditional versus renewable/ recycled/ lightweight material per ton less any additional operating costs required
	Lower costs on energy and resources used in manufacturing when using renewable/recycled lightweight materials	Higher operational efficiency	Differential in weighted average spend on energy and resources in traditional manufacturing versus the weighted average spend on energy and resources in manufacturing using renewable/ recycled/ lightweight materials multiplied by the amount of substituted sustainable material less any additional amount of operating costs incurred on using the substitute materials.

ROSI key findings

Waste management reduces costs, generates additional revenue

Examples of Practices

- Process improvements to recover, reuse, and recycle waste (including water)
- Increase the number of landfill-free sites
- Dedicated group to identify reuse opportunities



Results

- Cost savings due to lower spend on virgin materials
- Increased net revenues from sales to recyclers
- Reduction in water costs by using recycled water
- Energy savings due to lower use for recycled vs virgin materials
- Reduction in waste disposal costs

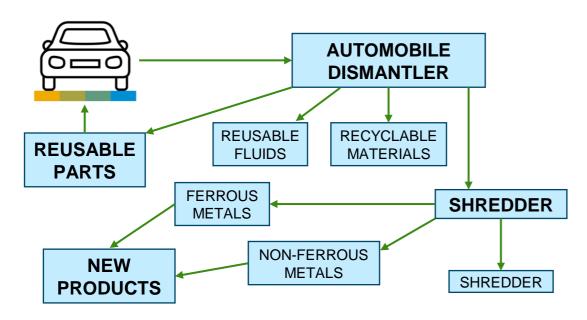
EBIT impact of \$235 million

ROSI key findings

Incorporating benefits of sustainability strategies into decision-making requires a systems thinking approach

Examples of Practices

 Recovering and recycling materials from end-of-life (EOL) vehicles – to maximize the benefit, reusable material needs to be incorporated in the car design



Results

- 2.5% of treated EOL material was recovered and reused and 10% was sold to recyclers in Europe
- Savings achieved from reduced virgin materials, process savings, and lower disposal costs, and in incremental revenues generated from sales

Total EBIT savings of \$100 million

ROSI key findings

Current reporting frameworks may not be adequate for measuring financial benefits

Examples of Practices

- Number of product recalls is standard reporting, but not financial impact
- Information on costs is needed to understand the financial impact; not currently aggregated



Results

- Average repair cost per vehicle times average number of cars per recall
- Average legal and PR costs per recall
- Money spent on increased quality control, premium redesigned parts, and additional training

The financial benefit of more than a dozen fewer recalls was more than \$550 million.

How to monetize the return on sustainability investment

Create a cross-business unit of executives to manage the process. It can be led by the sustainability function or finance.

For each sustainability strategy embraced by the company (ensure they all tackle material ESG issues), identify the ROSI benefits of key practices.

Assess the baseline and put in place tracking mechanisms to assess ROSI over time.

For forward-looking projections, use the same process, but you will need proxies for some data on which you build your assumptions (see NYU Stern ROSI library for help).



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