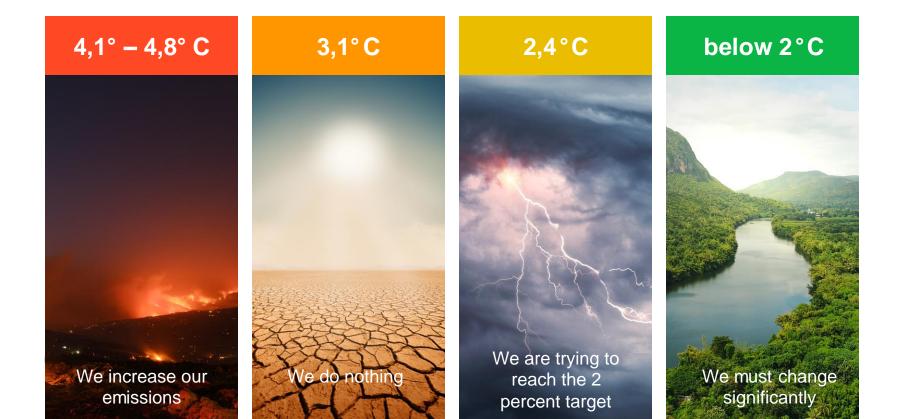


SCENARIOS









WHY IT-SOLUTIONS?

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Automation

New business opportunities

Legal situation

The Paris Agreement

COP 26

GHG Protocol

Climate protection and supply chain law

Pressure in the supply chain

Scope 1, 2, 3

Pressure from users

66% more green products

72% are millenials

50% are babyboomers





Emissions Reduction in the Supply Chain



Why Reduce Carbon?

Why is CO2 reduction important to your business?

Society



Maintenance of business



Financial performance



THE DRIVER FOR BUSINESS - SOCIETY





The science shows clearly that in order to avert the worst impacts of climate change and preserve a livable planet, global temperature increase needs to be limited to 1.5°C above preindustrial levels. Currently, the Earth is already about 1.1°C warmer than it was in the late 1800s, and emissions continue to rise. To keep global warming to no more than 1.5°C – as called for in the Paris Agreement – emissions need to be reduced by 45% by 2030 and reach net zero by 2050" (un.org, 2022).

Highlights from COP 27

Current plans wont realize 1.5°C increase by the end of the century

Top 20 counties account for 80% of the emissions yet the smallest and poorest countries are hit with the greatest impact

Dialogue has been focused on reducing every increment above 1.5 °C

Loss and Damage Fund for vulnerable countries.
Commitment to deliver \$100 billion a year of financing

Need to reduce emissions 43% compared to 2019 levels

Only 29 out of 193 countries submitting tightened national plans since cop 26

2030 is around the corner – 1% of the decade is lost every 5 weeks!

The challenge falls on Businesses not countries!

THE DRIVER FOR BUSINESS - PRESSURE TO MAINTAIN BUSINESS

For many companies there is legislative pressure that flows down the supply chain from both government targets as well as the Original Equipment Manufacturers (OEMs). This pressure will result in companies needing to demonstrate a CO2 reduction plan, document science based targets or receive specific certifications such as ISO14001.

Companies need to and will be forced to drive emissions reduction into their processes

Will this really make a difference?

There is still an ongoing debate surrounding the impact to companies of not lowering emissions.

It is logical to assume that at some point, should a company not be able to demonstrate carbon reduction targets in line with expectations, then they will not be eligible to bid for work, or be taken off "approved vendor lists".

May 2021 – Royal Dutch Shell ordered to cut 45% emissions by 2030 by Dutch Court – lost 3 board members.

As an example, Volvo have for many years required all their vendors to have an IS014001 compliant environmental management system in place.

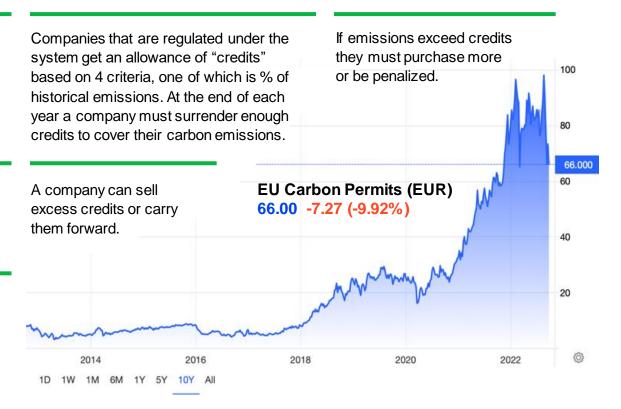
The US government on the 10th November 2022 - Federal Supplier Climate Risks and Resilience Rule – requires major federal suppliers to disclose their greenhouse gas emissions (scope 1, 2 and 3) and set science based emissions reduction targets. In line with the Federal government plan to get to net zero by 2050.

THE DRIVER FOR BUSINESS - FINANCIAL PERFORMANCE

There is a financial incentive for organizations to reduce their emissions. This is demonstrated by the first major carbon market, the EU Emissions Trading System (EU ETS) which is a classic cap and trade system.

The catch, of course, each year the "cap" gets reduced, forcing companies to buy more credits, which in turn drives up the cost of the credit.

The logic behind the design of the system is that as the price of the credit approaches the cost required to put in place emissions reduction activities, companies will be enticed to invest.





EMISSIONS IN MORE DETAIL



Scope 1 - Direct GHG Emissions

Direct emissions from activities that a company owns or controls.

These will include emissions related to:

- Emissions from combustion of owned assets
- Company vehicles
- Emission leaks from operations



Scope 2 – Indirect GHG Emissions

Emissions from generation of purchased electricity

This includes:

- · Use of purchased electricity
- Heating
- Cooling



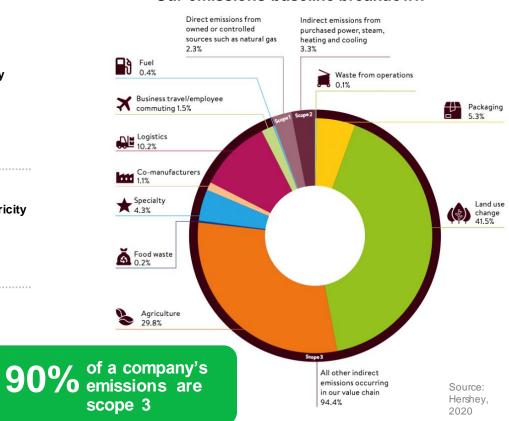
Scope 3 – Indirect GHG Emissions not scope 2

Emissions from the value chain of the reporting company

This includes emissions related to;

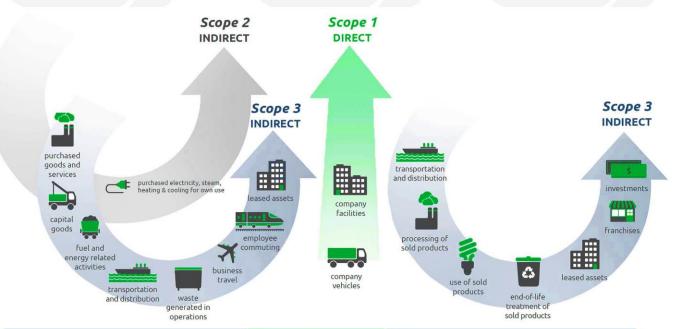
- Manufacture of purchased products
- Transportation of purchased products
- Use of sold products

Our emissions baseline breakdown



SCOPE 1, 2 AND 3 EMISSIONS

CO₂ CH₄ N₂O HFCs PFCs SF₆



Source: GHG Protocol 2022





SCOPE 3 FOCUS – COMPLEXITY OF SCOPE 3

Maturity



This will impact

- Access to data
- Reduction of emissions

Data	waturity	Power	Relationship
Duplication of requests	Does vendor currently measure emissions	Can you influence the vendor	Transactional v strategic
Different formats requested	Does vendor understand scope 1, 2 and 3	Annual spend with vendor	Goal alignment
Accuracy		% of vendors business	Contractual scenario
Quality	Is vendor receiving pressure to report	Ease of identifying a new vendor	Regular business
Transparency	emissions		reviews
Risk of greenwashing	Emission reduction plans in place		Collaborative trust

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CONSIDERATIONS FROM THE BUYER – CUSTOMER OF CHOICE AND COLLABORATION REQUIRED

High **Inter Dependence Buyer Dominance** Align Strategically – SRM focus Set the strategic expectations Jointly push the agenda Mandate buy in to policy Industry led initiatives Open and align contracts Industry led investment Measure improvement plans **Alternative Vendors** Low **Supplier Dominance** Independence Alter the design RFQ Market Make v Buy analysis Mr. Market defines the survivor Generate alternative product Apply contractual requirements Identify strategic win with alignment - SRM Drive industry collaboration - SRM **Buyer Power** Souce: Adapted from Kraljic 1983, Cox et al, 2000

HIGH LEVEL RECOMMENDATIONS FOR REDUCING SCOPE 3

Step 1

Align your organization's thoughts

- What do you want to achieve and why?
- Who are your stakeholders and what motivates them?
- Understand your vendor data cube – type of products / services, location, spend etc,.
- What is your current carbon footprint? There are several providers that can help you calculate how your organization is performing today
- What are the ideas you already have for emissions reduction?

Step 2

Engage with vendors / peers / Industry groups

- Speak with your key suppliers to understand what they are currently doing to reduce emissions – they may already have a program
- Explain the challenge you have and why you need to work together
- Join / discuss industry groups to understand what your peers are already doing
- Understand the technology that is available to support the task

Step 3

Plan of action

- Identify a sustainability champion in your organization
- Based off the input from steps 1 and 2 create a target that is a stretch but realistic
- Communicate your target publicly to ensure accountability for the organization
- Identify clear time bound steps that need to be taken to meet your targets
- Hold regular team meetings with the project team (including your vendors) where appropriate

Step 4

Sustainability and action orientation

- Build ESG into your process –
 e.g. no new vendor on a
 category strategy unless they
 align to emissions reduction
 goals
- Procurement teams are measured and rewarded on CO₂ reduction achievement



Your experts:



Dr. Lyubomyr Matsekh [Lyubomyr.Matsekh-U@eleks.com] is head of consulting practices at ELEKS. In this role, he and his team develop strategy for creating technology leverage for companies worldwide. After living and working for several years in Asia, he is back in Europe, where besides working for ELEKS, Dr. Lyubomyr teaches leadership, sustainability and social entrepreneurship at several universities in Baden-Württemberg (Germany).



Kai Ritter [kai.ritter2@gmx.de] studied automation engineering and has already worked on several Industry 4.0 projects. He has also gained experience with sustainability in the production environment. During his studies in Digital Business Management, he works at the Center for Entrepreneurs hip at Reutlingen University.



Richard Brattle [Richard@brace-associates.com] spent the first 20 years of his career focusing on supply chain management and strategic procurement at Rolls-Royce and Siemens Energy. He ran the supply chain management function for the Aero Derivative Gas Turbine business and was global head of strategic procurement for large machining for Siemens. Richard has since founded Brace Associates, a company focusing on supporting small to medium organizations on how to get the maximum value from their supply chain.

Richard has an MBA with honours from the European School of Management and Technology and degrees in Business Management and Supply Chain Management.