DON'T SIT ON SUSTAINABILITY

RECOGNIZING THE LINK BETWEEN SUSTAINABILITY AND PERFORMANCE



1. WHO IS SPARQ360?

2. WHAT IS SUSTAINABILITY & ESG

3. THE BUSINESS CASE FOR SUSTAINABILITY

4. SUSTAINABILITY CASE STUDY AND ROADMAP

5. RECAP AND DR. SEUSS



AGENDA

WHO WE ARE



- Supply Chain and Sustainability consultancy
- SPARQ360 is scalable and global
- Global Supply Chain & Sustainability experts that help implement and manage continuous improvement
- On average our consultants have **20+ years** of industry and management consulting experience
- We are supply chain operators, sustainability enablers, engineers, and LEAN experts
- We provide customized solutions that create momentum and deliver results
- We supply deep hands-on experience, processes, and innovative technology



WHAT DOES SPARQ360 DO?

SPARQ360 helps organizations change and innovate faster by developing solutions for critical challenges:

- Do you have a clear plan for Sustainability that engages key stakeholders employees, customers, suppliers?
- Are you facing challenges with high supply chain and freight costs?
- Is your organization staying ahead of the competition by adapting, optimizing, and innovating at a rapid pace?
- Are you maximizing the use of your current technology and exploring new technological advancements to enhance day-to-day operations?

Our comprehensive approach integrates people, process, and technology to:

- Drive and expedite sustainability initiatives within your organization.
- Enhance the effectiveness of your supply chain, improving cost, quality, and service.
- Employ effective change management strategies to successfully implement new solutions.



SUSTAINABILITY & SPARQ360



What differentiates our global sustainability efforts?

Lean focused, global supply chain & sustainability expertise

Activating collective intelligence via engagement and change management

Innovation / Ideation Methodologies

Operating clients' sustainability program and initiatives

Application of advanced technologies and solutions

WHAT DOES SPARQ360 DO?

We like to solve problems.



WHAT IS SUSTAINABILITY AND WHY IS IT SO DARN IMPORTANT?

Sustainability focuses on meeting the needs of the present without compromising the ability of future generations to meet their needs.

The concept of sustainability is composed of three pillars:

- Environment
 - o Water
 - o Energy
 - o CO2

- Scope 1 Your Direct Emissions
- Scope 2 Your Indirect Emissions
- Scope 3 Emissions from Suppliers

- Social
 - o Diversity & Inclusion
 - o Working Conditions
- Governance
 - o Reporting & Disclosure
 - o Risk Management

ESG, is in part, based upon the United Nation's 17 Sustainable Development Goals (SDGs)



Countries & organizations around the globe are collaborating on a scale never seen before to make substantial progress on the above 17 SDGs by 2030.

WHAT IS SUSTAINABILITY AND WHY IS IT SO DARN IMPORTANT?

Over-exploitation of natural resources that accompanied economic and demographic growth.

Market failure: Hidden environment costs are not reflected in market prices.

Accelerating resource depletion, waste generation, and environment pollution due to shortened product life-cycles (technology advances) and changing lifestyles since the industrial revolution.





An unsustainable lifestyle...





WHAT IS SUSTAINABILITY AND WHY IS IT SO DARN IMPORTANT?

What does sustainability mean for our world?

- Improves the quality of our lives
- Protects our ecosystem
- Preserves natural resources for future generations

What does a sustainable workplace mean?

- A sustainable workplace establishes the goal of balancing the planet, people, and profit to produce success and viability in the long-term
- Produces happier more motivated workers, which eventually increases employee productivity









THE BUSINESS CASE FOR SUSTAINABILITY

Like it our not the UN's 17 SDGs are pushing countries and companies to act differently. A structured ESG (environmental, social & governance) strategy and program is becoming a necessity.



Young talent prefers to work for companies that take their responsibility in sustainability and ESG and actively engage their employees in it.



Governmental regulations increase and change fast, forcing companies to implement sustainability and ESG programs. For example, CSRD and TCFD.



Strong increase of global attention for environmental actions in the fields of carbon emissions, waste reduction, energy consumption & circularity.



Increasing customer's demand on sustainability performance of their suppliers that forces them to comply & collaborate in sustainability programs.



Brand reputation is strongly impacted by the performance on sustainability and ESG and this will increase further.



ess performance of companies becomes more and more important in the valuation of companies.

INGREDIANTS OF AN EFFECTIVE SUPPLY CHAIN SUSTAINABILITY PROGRAM

Holistic Sustainability Increase your contribution to People, Profit and Planet in a sustainable way

Customer Requirements

To fulfill customer requirements

Employer Branding

Attract new workers and increase employee satisfaction

Compliance & Regulatory

Comply with legal and regulatory obligations such as Supply Chain Act, TCFD AND CSRD

Brand Reputation

Improve your brand reputation

Company Valuation

Increase the value and credibility of your organization

Realizing Your Goals

SPARQ360

CASE STUDY:

SUSTAINABILITY IMPLEMENTATION

- COMPANY ESG OR CSR OVERVIEW
- DEFINITION & SCOPE
- VISION / GOALS WHAT ARE WE GOING TO DO?
- WHERE ARE WE TODAY?
- NEXT STEPS CALL TO ACTION

SUSTAINABILITY CASE STUDY OVERVIEW & GOALS



Conduct ESG Assessment

Benchmark your sustainability performance (consider Ecovadis)

Ambition: Create a more sustainable world by 2030

Positively impact the environment through our operations!

Goal: Carbon Positive Operations

Set science-based carbon reduction targets by 2018 and become carbon positive in our operations

Goal: Sustainable Water Use

Sustainably use water by mapping water risks and setting contextbased targets

Goal: Zero Waste to Landfill

Achieve zero waste to landfill in operations

DEFINITION & SCOPE

Our sustainability initiative no longer simply seeks to reduce negative impact, but to positively impact the environment across our footprint

Clear goals for energy, waste, and water improvements are crucial for successful change management in your organization.

ENERGY

Renewable Energy, EV-Trucks & Lifts, Alternative BioFuels, Robotics, Green Buildings, IoT, EMS

> SITES 100%

10 sites

EMISSION

MEASUREMENT

150 sites

WATER

Water recycling system, Rainwater harvesting, Graywater system, Closed loop water cooling system

REDUCE **GALLONS USED** 1000000

SITE

50000

GALLONS PER

WASTE

Cube, Package optimization, **Reverse logistics, Returns** Management, Recycling & Sorting technology

> ZERO WASTE TO LANDFILL 50 sites

POUNDS PER SITE 100000

Wastes that cannot be landfilled due to local regulations will likely be excluded Example: Asbestos

Sites that have no control over the disposition of their wastes may potentially be excluded

SPARO

VISION / GOALS

CARBON POSITIVE OPERATIONS

CARBON

Current Goals:

- Avoid and Drive Efficiency
- Investment Determine if there are cleaner ways to invest
 Example - Electric vs. Fuel
- Convert Scope 1 emissions (fossil fuels), purchasing renewable electricity for Scope 2 operations and generating renewable energy back into the grid

Long-term Goal: Reduce Scope 2 usage and power all plants with purchased or site generated renewable energy by 2025.

Long-term Goal: Goal: Eliminate all Scope 1 usage by converting to electrical or other bio-fuels by 2025.

Avoid

Reduce use, drive efficiency

- Avoid carbon intensive business strategies
- Look for lower carbon delivery models (i.e. services, rentals)
- Identify, drive projects around energy efficiency
- Create an energy efficiency culture

Replace

Offset

- Electrify scope 1 sources
- Purchase lower-carbon grid sources
- Investigate onsite renewables

Offset sources that cannot be replaced

ESG TRANSPORTATION QUESTION:

Which truck produces more carbon emissions per mile?



CASE STUDY: CARBON REDUCTION EXAMPLE



<u>Opportunity:</u> A major retail chain had a simple high-level supply chain network comprising suppliers, customers, and several distribution centers. Deliveries were made on two types of vehicles: 28t and 44t – with the larger size used for longer distances.

<u>Findings:</u> A critical finding (based on publicly available data) was that the 28t truck produced more emissions per mile driven, opening an opportunity to see if a configuration change would lead to lower emissions overall. It did.

<u>Solution:</u> Optimizing the model to cap emissions at 88m kg (nearly a million kg below the base case) led to a cost saving of around UK£2m – demonstrating how a change in configuration to reduce emissions can benefit the bottom line, too.

The company with the shortest supply chain wins* and is the most sustainable. Focus on reducing lead times, distances, and optimize equipment usage.

* Peter Drucker

VISION / GOALS ZERO WASTE TO LANDEIL

WASTE

Current Goals:

- Adopt a culture that makes waste minimization a consideration
- Understand your Waste Profile
- Identify and confirm the waste disposition status for each waste
- Evaluate each Landfill Waste Stream for reduction or elimination opportunities.
- Identify local vendor resources for incineration, recycling, and re-use strategies.
- Establish a robust Management of Change Process to ensure that no new wastes are introduced that cannot be managed as zero landfill.

Long-term Goal: Use 100% renewable or recycled materials for all products and packaging – Play in the Big Leagues!

Prevention

Preparing for re-use

- Using less manufacture
- Keeping products for longer, re-use.
- Using less hazardous materials
- Checking, cleaining, repairing, refurbishing whole items or spare parts

Turning waste into a new substance or product including composting if it meets quality protocols

Includes anaerobic digestion, incineration with energy recovery, gasification and pyrolosis which produce energy (fuels, heat and power)

Landfill and incineration without energy recovery

The hierarchy ranks waste management options according to what is best for the environment!

Other recovery

Recycling

Other recovery

Disposal

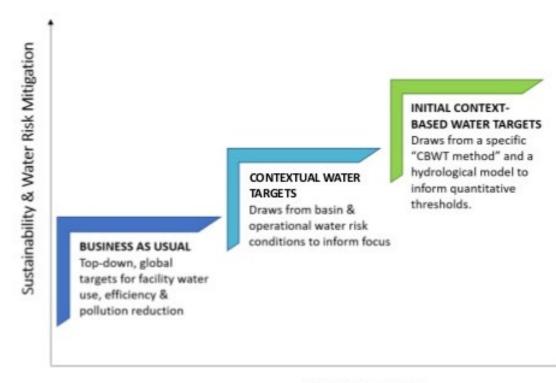
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VISION / GOALS SUSTAINABLE WATER USE

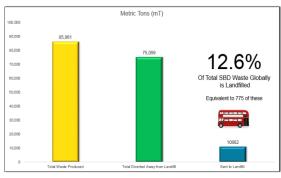
Current Goals:

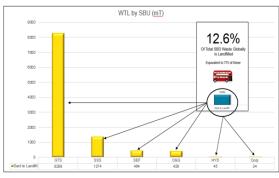
- Champion on-site reduction targets to support the goals
- Sustainably use water by mapping water waster risks and setting context-based targets

Long-Term Goal: 40% Reduction of Water usage by 2022 / Improve Water Infrastructure in Scarce Locations



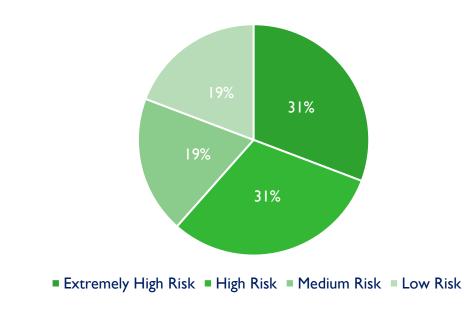
Time & Resources





* Zero Waste to Landfill (ZWTL)

High Water Risk Mapping



WHERE ARE WE TODAY?

SPARQ360

Our zero-landfill profile

Rolling 12 Month Data Through June 2018 by Business

CO2e(mT) All Sectors

CO2e(mT) All Sectors

Scope1 Scope2 Scope3

250000

150000

150000

EMEA & ANZ

Rolling 12 Month Data Through June 2018 by Region

SITE ENGAGEMENT PROCESS



1			
BUILD	A	PL	AN.

To achieve goals: Build a plan and kick off projects.

ORGANIZE PEOPLE

Get specific on what everyone is going to actually do. This is a topic that many people are passionate about and we will just need to point them in the right direction.

TRACK RESULTS

Track results and celebrate success.

4 COMMUNICATE

Recognize the people who contribute the most, communicate internally and externally, showcase our people and achievements (engagement).

5 REPEAT

Each year.

SUSTAINABILITY SUMMARY

- 3 STEPS TO KICK START YOUR SUSTAINABILITY JOUNEY
- 6 THINGS TO REMEMBER
- ARE YOU READY?
- WHAT DOES DR. SEUSS SAY ABOUT SUSTAINABILITY

TAKE 3 STEPS TO KICK START YOUR SUSTAINABILITY JOURNEY

INITIATE Get started

Step 1:

- Assess the organization's current sustainability performance and program
- Double Materiality Assessment
- Register with Ecovadis to obtain rating

Step 2:

- Develop Company ESG or Sustainability Strategy / Build Sustainability House
- Set Sustainability Goals and Budgets
- Establish Metrics

Step 3:

 Create or Adjust = Sustainability Program / Policies

ACCELERATE

Increase momentum

Step 4:

- Engage Stakeholders
- Communicate, Train, and Collaborate

Step 5:

- Implement program, policies, and procedures
- Build Business Plans Process changes and investment plan
- Build Site Level Plans Process changes, technology plans, investment plans

OPERATE

Provide ongoing support

Step 6:

- Monitor and evaluate Sustainability Program
- Measure Progress and identify areas of improvement
- Audit Progress (Assessments)
- Continually engage stakeholders and reward performance.

Step 7:

- Improve Program
- Adapt to changing circumstances
- Set new goals
- Innovate and Improve
- Communicate Externally



6 THINGS TO REMEMBER ON YOUR SUSTAINABILITY JOURNEY

- 1) Keep it simple, start your journey by performing a sustainability assessment then work to **Avoid**, **Reduce**, **Replace**, **and Offset**
- 2) Identify and minimize carbon emissions and energy consumption from **design**, manufacturing, final destination **through end of life**
- 3) Decrease supply chain and manufacturing waste
- 4) Continue to push for eco-friendly sourcing & manufacturing
- 5) Increase collaboration with all parties involved
- 6) Monitor regulations to help improve supply chain sustainability transparency via related KPIs



Minimize waste and maximize resource efficiency by promoting the reuse, recycling, and responsible management of materials throughout their lifecycle, creating a sustainable and regenerative economic system.

ARE YOU READY?



Do you have a Sustainability or ESG program in place that is based on the future needs and risks of your organization and it's internal and external stakeholders?



Are you ready to comply with the new governmental regulations, such as the new EU Corporate
Sustainability Reporting Directive (CSRD) 2023?



Are you ready to meet your (future) customer demands on sustainability?



Are your employees, customers, suppliers and direct communities engaged in your sustainability programs and do you use their ideas an inputs to become better?



Do you feel your company isn't making sufficient progress even though there are several sustainability initiatives across the organization?



Are your competitors getting more recognition for their sustainability efforts?

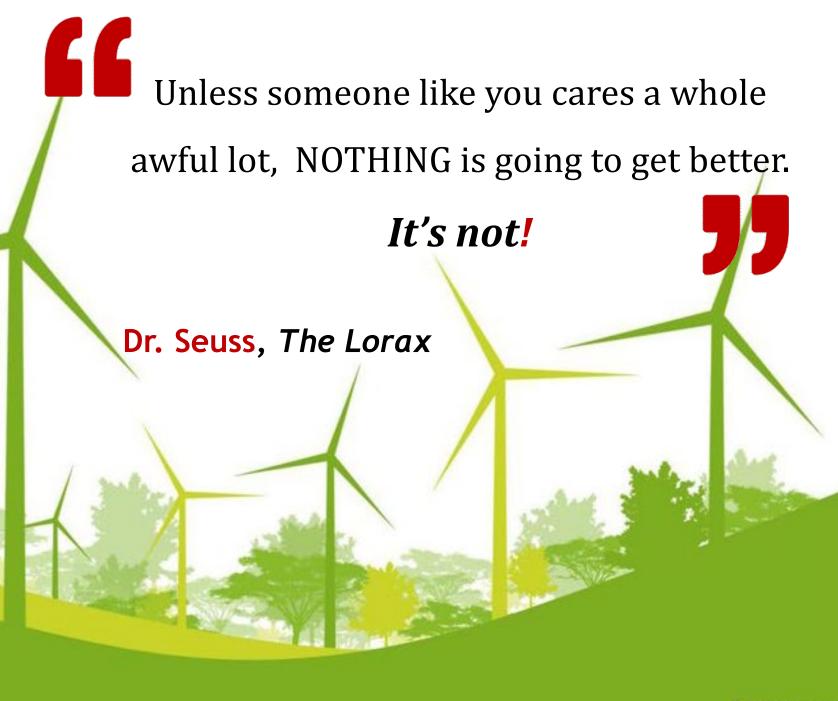
SPARQ360 THANK YOU!!



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APPENDIX

Resource	Description
<u>Ecovadis</u>	The World's Most Trusted Business Sustainability Ratings
TCFD	US Task Force on Climate Related Financial Disclosure
CSRD	European Commission - Corporate Sustainability Reporting Directive
<u>CDP</u>	The world's economy looks to CDP as the gold standard of environmental reporting
<u>CSCMP</u>	State of Supply Chain Sustainability 2021 report
SAFA	Sustainable Air Freight Alliance
CCWG	Clean Cargo Working Group
Climate Group	EV100, helping to make EV transport the new normal by 2030
REI00	Renewable Energy
WBCSD	World Business Council on Sustainable Development
WEF	World Economic Forum alliance for clean air World Economic Forum first movers' coalition World Economic Forum road freight zero
UN Ocean	UN Ocean Stewardship Coalition

CHECK OUT THE FOLLOWING SUSTAINABILITY RESOURCES TO LEARN MORE

INCREASING ESG REGULATION & INITIATIVES



Action to the Party

Commission -Adoption of NonParis Agreement - United Nations Framework Climate Change



Network of Central banks and Supervisors for Greening the **Financial Sector** Launch



European Commission Amendment to nonbinding guidelines on non-financial information, aligning with TCFD



European Parliament sets out plan for investor sustainability disclosure rules



The technical screening criteria for climate change mitigation and adaption on the taxonomy issued as part of the specific legal



DNB announced self-assessment for banks



Mandatory reporting level 1 SFDR (10 March 2021)



CSRD

The European Commisson announced the CSRD, which amends the NFRD and requires companies to report on the environmental impact of their activities by 2023. supplemented by an indipendent audit report. The CSRD significantly increases the scope of companies to around 50,000 companies within the

2022 > 2014 2015 2017 2019 2020 2021

Sustainable **Development Goals** developed by United Nations



PRA Report - on the impact of climate change on the UK insurance sector

TCFD - Taskforce on Climate-Related Financial Disclosures published Final Report

SFAP European Commission launched the Sustainable Finance Action Plan



Low-carbon benchmarks **European Commission** adopted the low carbon benchmarks

EMSA and EIOPA published technical advise on MiFID II, UCTIS, AIRMD, IDD and Solvency II

European Central Bank published final guide on climate related and financial risks for banks



SFDR Level 1 European Commission published the Final Regulation SFDR (level 1)



Fit for 55

European Commission introduces an additional set of regulatory initiatives to meet its ambition of 55% less reduction by 2030



SFDR level 2

expected to be

legislation

in force

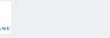
EU Taxonomy Companies under the NFRD/CSRD will

be required to disclose in the course of 2023 on activities related to all environmental objectives



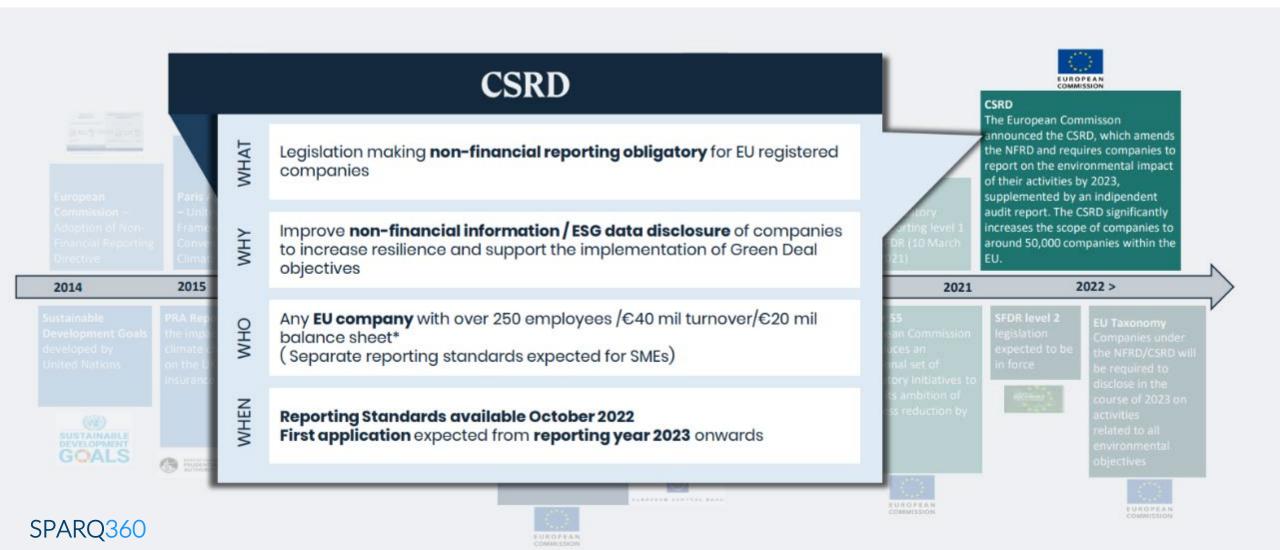








INCREASING ESG REGULATION & INITIATIVES



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