IBM Sustainability Software

## Turn sustainability ambition into action

Tania Van Garsse IBM





What is fundamentally needed is a change in behaviour in each and every one of us, in all situations





#### Reasons & Root Causes Global sustainability problems and challenges



# IBM

### Sustainability Trends due to Market, Financial Risk & Societal Shifts

## 17

17 integrated SDGs adopted by all UN members in 2015. A globally accepted framework with specific metrics across the 17 goal

#### 57%

Of consumers are willing to change their purchasing habits to help reduce negative environmental impact

#### SUSTAINABLE DEVELOPMENT GCALS 2050

The European Union as well as the UK have committed to net-zero carbon emissions by 2050, with several counties and U.S. states committing to eliminate emissions and transition to renewable power even sooner

### 7.2M

Over **7.2 million electric vehicles** were on the road at the start of **2020**, after a 40% year-on-year increase in 2019

## 2060

China has pledged to reach **carbon neutrality before 2060** and ensure its greenhouse gas emissions peak in the next decade. It is also calling for a green recovery from the pandemic

## 1.8B

Euro will be invested as part of European Recovery Program 2021 – 2025 aims to create a greener, more digital Europe

### 5 YEARS

The European Green Deal will put legal & regulatory frameworks in place in the next 5 years to become the first carbon- neutral geography in the world

#### 90%

The Energy Innovation & Carbon Dividend Act has been put forward. It puts a price on carbon-emitting fuels, at the source & delivers all revenues to households as monthly dividends. It is projected to reduce greenhouse gas emissions 90 % by 2050



# Companies will soon be judged by what they do for the planet, and not what they say they will do.

# The 3 dimensions

Sustainability management in the enterprise







#### **Environmental Footprint**

What counts into my environmental footprint?

It depends ... Corporate, Product, Project ...

#### The 3 Scopes of GHG Emissions



https://ghgprotocol.org/

#### Turn sustainability ambition into action

Sustainability Strategy and Roadmap

Co-creating a sustainability agenda and pathways towards delivering corporate social impact and business value

ESG Data, Reporting and Risk Management

System of record for ESG data and insights to measure, report, operationalize and achieve your sustainability roadmap



#### Intelligent assets, facilities and infrastructure

Operational insights to drive clean energy transition, efficient waste management, and decarbonization



Responsible computing and green IT

Responsible computing to enable sustainable IT and drive social impact

Sustainable supply chains and circularity

Intelligent workflows for equitable, transparent, and carbon regenerative supply chains To thrive in a sustainable world, leaders must:

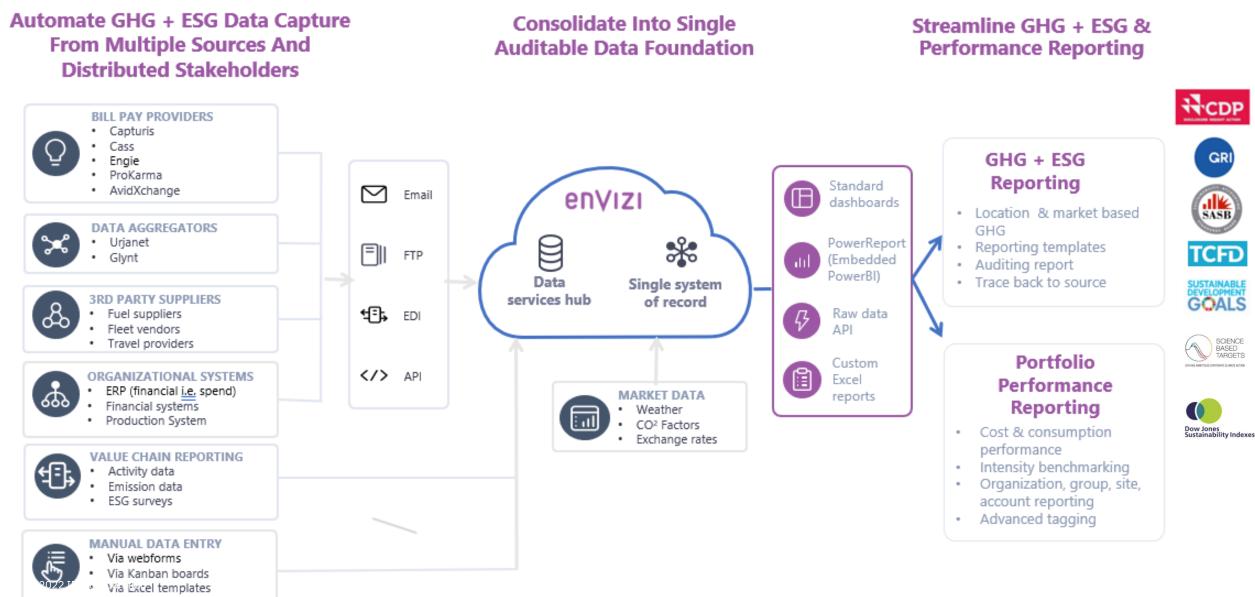
Define their ESG/sustainability Goals

2 Establish a clear Baseline

3 Operationalize their sustainability goals



## Envizi - Data Capture for ESG Reporting



Via surveys



#### Managing your assets

#### You have been doing this for years!

Let's consider asset lifecycle management with a sustainability focus?





#### Green and sustainable Asset Management

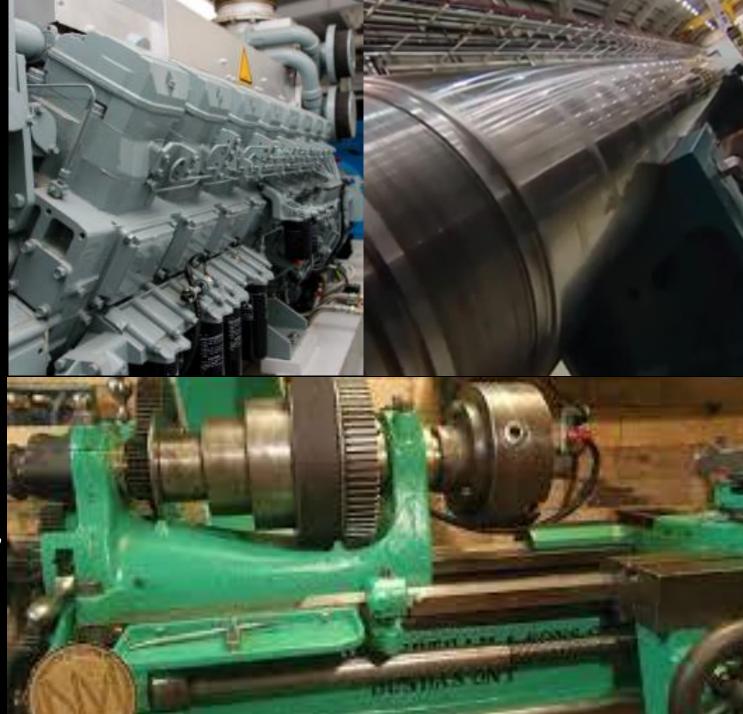
Consider a sustainability index in the maintenance, repair and overhaul of your assets and facility

	Environmental	Operational	Technical
Environmental	Reduce service visits. Reduce spare parts consumption. Reduce energy consumption and carbon production	Move from timed preventative maintenance to condition based thus reducing unnecessary maintenance	Use more automation (sensors and analytics). Invest in machine learning and AI for fault analysis
Social	Encourage first time fix, more collaboration, easier access to policy and information, reduced road traffic, reduced pollution	Everyone has a part to play in the climate solution. Encourage a climate consideration philosophy	Normalizing a discussion about sustainability in technical meetings will empower others to raise their voice.
Governance	Move workload to regions or times when the carbon intensity is less. Discourage multi- visit service	Focus on step-by- step optimisations that increase the overall carbon efficiency	Build GHG-aware processes / maintenance methods and policies



#### Asset Health & Longevity Enhancement

- Some assets seem to run for years with little
- or no problems. If it's not broken, don't try to fix it springs to mind!
- These assets may be very old and in some cases impossible to replace
- Use sensors to monitor power consumption, vibration and temperature. Identify anomalies and predict problems.
- Act before they escalate into bigger problems





#### Asset Management for Sustainability

Manage business operations end-to-end to improve performance and sustainability targets

•••	
=	

#### IoT / SCADA data collection

Automate data collection – there is a lot of data out there so start making it useful

# Automated fault detection and work order generation

Build software robots to complete repetitive tasks

Reduce manual intervention on repetitive tasks

	<u> </u>

#### Sustainability focused maintenance execution

Bring all relevant content and data together

Automate work packages that include sustainability principles

#### **Continuous improvement**

Don't just stop when you've see an improvement in your sustainability – keep looking for the next opportunity to improve



# Envizi's value proposition to address key pain points

Envizi is with client's every step of their sustainability journey, whether they need to consolidate their data, streamline reporting, identify efficiency and emission reduction opportunities, or inform business strategy.





# *LET'S DO IT NOV!*

# TOGETHER

