Maximo Wednesday - Operationalizing Sustainability with Strategic Asset Management

—

Envizi Integration

Joe Baker
Senior Sustainability Specialist
September 21, 2022

© 2022 IBM Corporation

November 6-18
Sharm El-Sheikh, Egypt
United Nations Climate Change Conference

MUWG
MAXIMO UTILITY WORKING GROUP

Join Us In Birmingham!

Learn Maximo efficiency and best practices from the best in the business, while building lasting partnerships. The MUWG conference is dedicated to providing the a collaborative environment for all attendees.

About the Event

Hosted by: Southern Company

We've made our name as a leading producer of clean, safe, reliable and affordable energy, and we approach each day as a vital step in building the future of energy.

Learn More

Conference Vendors

MUWG recognizes the value that Vendors provide to the successful use of Maximo. Meet your next client while supporting MUWG as a Sponsor.

Vendor Information

Special Event: MUWG Silver Anniversary – Celebrate 25 Years of MUWG with IBM!

Event details can be found in the conference information and in the event agenda.

To thrive in a sustainable world, leaders must:

1 Define their ESG/sustainability Goals

2 Establish a clear Baseline

3 Operationalize their sustainability goals

Trailblazers are driving growth by aligning sustainability initiatives and digital transformation

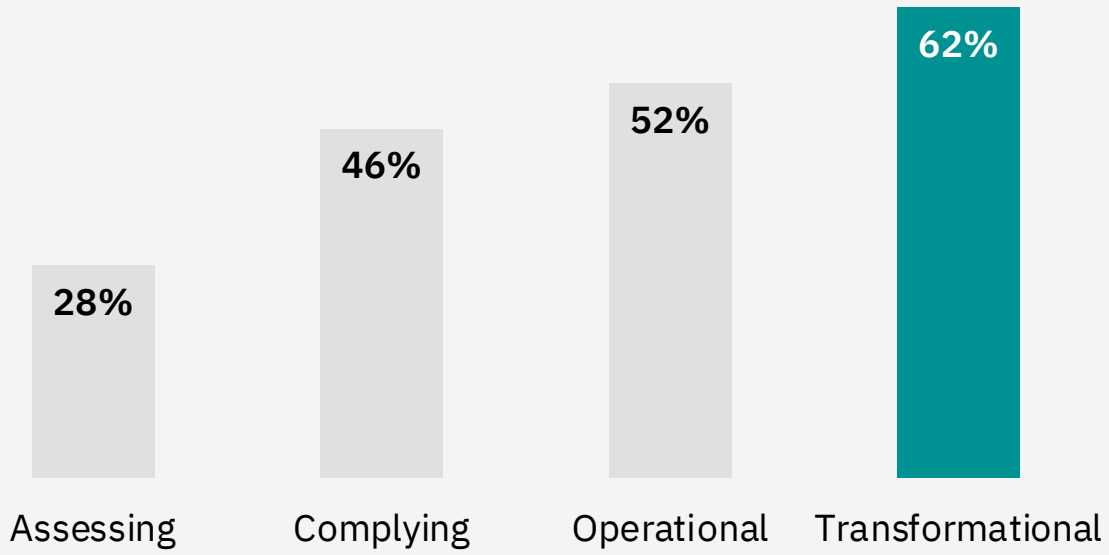
72%

are piloting or implementing only parts of their sustainability strategy

30%

report explicitly aligning their sustainability and digital transformation efforts

% reporting sustainability outperformance



Transformational CEOs who go “all in” on sustainability are achieving better sustainability outcomes and better business performance

Sustainability vs ESG

What's the difference between sustainability and ESG?

- Sustainability is focused on reducing environmental impact by maximizing efficiency and minimizing resource consumption
  - Reducing waste production and energy & water consumption leads to lower carbon emissions
  - Focus on renewable energy procurement and on-site generation
- ESG is focused on standardizing sustainability metrics to facilitate regulatory disclosure and investor reporting
  - ESG Framework alphabet soup - CDP, GRI, TCFD, SASB, GRESB, SEC, NABERS, EU EPC, UN SDG
  - Scope 1, 2, & 3 carbon emissions, energy intensity, climate risk, and DEI
  - Comprehensive accounting of a business' societal impact

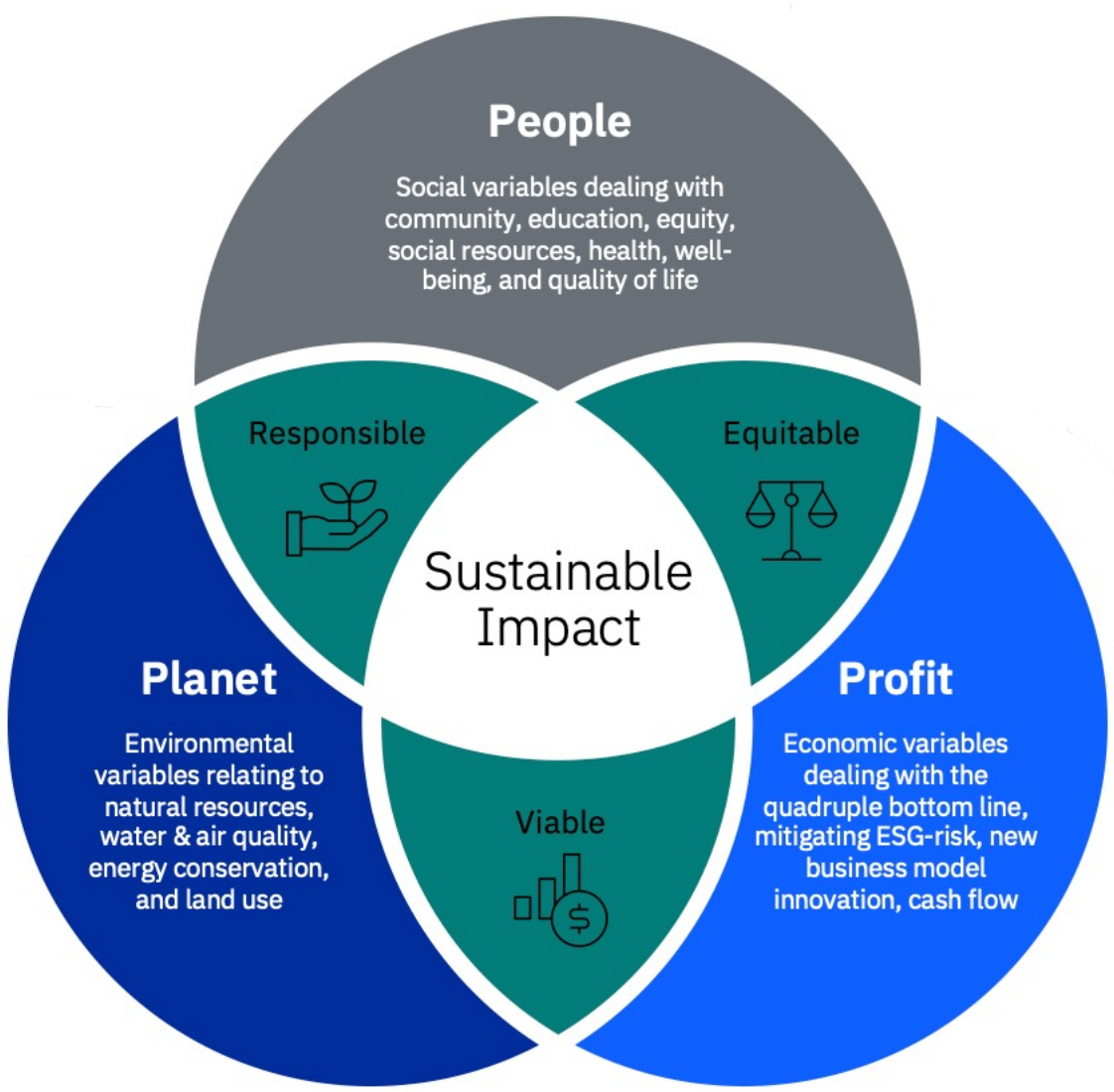
Public vs Private

Differences between sustainability strategies of governments and business

- Governments and public institutions are beholden to all members of society, particularly their constituents
  - Businesses are responsive to their shareholders, employees, and customers
- Governments must provide vital services and infrastructure while maintaining a balanced budget
  - Companies produce goods and services while striving to increase profits
- Sustainability reporting creates transparency between governments and the electorate, which leads to increased engagement and trust
  - ESG reporting allows companies to raise funding in capital markets, maintain regulatory compliance, and it provides a competitive advantage

IBM

Sustainability & ESG: Similarities and Common Ground



- We are working collaboratively to find solutions to protect the planet and all its inhabitants
- Building carbon-neutral organizations while the underlying infrastructure is still being rebuilt
- Sustainability permeates the entire organization; from facilities management, procurement and supply chain, transportation and logistics, financial reporting, and everything in between
- Operating in a constrained environment with limited funding and human capital, so we must prioritize the most impactful, yet cost-effective, projects and initiatives

IBM

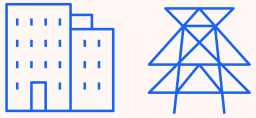
Connect your ESG data management with the systems that run operations to drive transformation

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

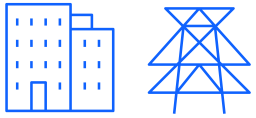
Create a single system of record for ESG data to establish a clear baseline

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

… for Sustainable Asset Management and Reliability Optimization

Enable creation of resilient and sustainable infrastructure and operations to extend the life of equipment, buildings, bridges, fleets, water lines and more to reach sustainability targets.

Asset Management & Maintenance

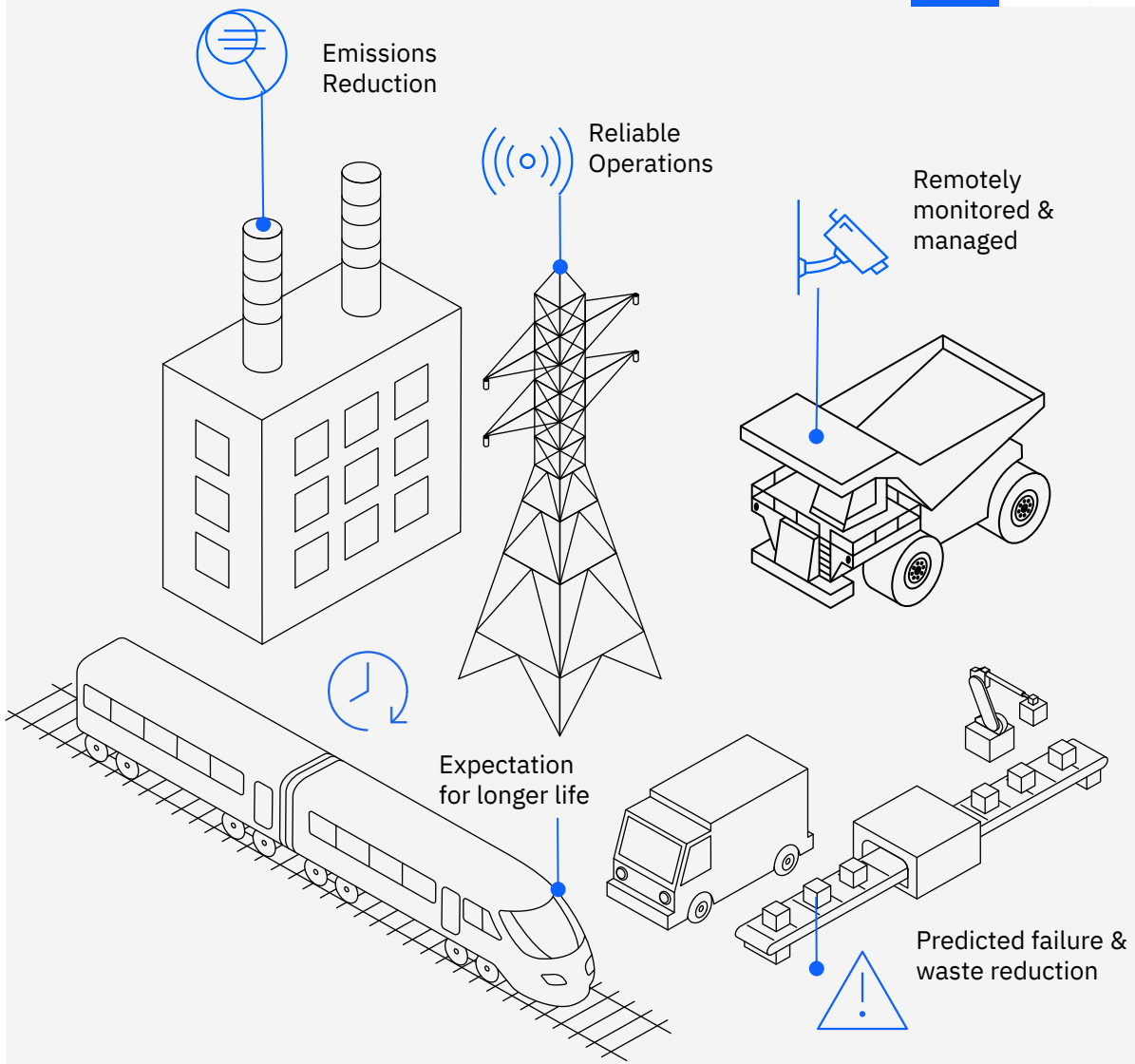
Optimize maintenance scheduling to achieve efficient, safe and sustainable work practices

Asset Reliability and Optimization

Extending asset life decreases waste & embodied carbon, and improves energy efficiency

Asset Monitoring and Fault Detection

Increased energy efficiency, equipment performance and reliability



Representative Use Case: Operationalize the reduction of GHG emissions and attainment of sustainability goals

A company with a hundreds of HVAC systems in data centers needs to track, reduce and report refrigerant refills and leaks

Measure

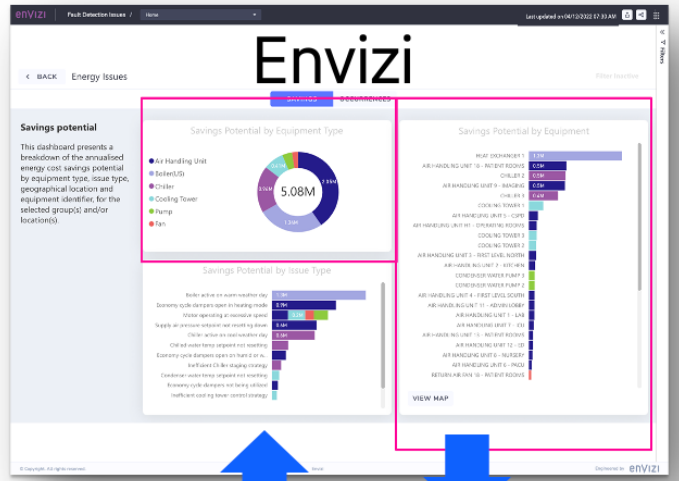
- Location hierarchy and related attributes like Location ID, Location name, site, installation date etc are pushed from Maximo to Envizi and automatically kept in sync. This eliminates manual effort, saves time and provides more accurate and up-to-date information in Envizi
- Refrigerant leaks and refill records from incidents and maintenance done in warehouses are automatically pushed from Maximo to Envizi

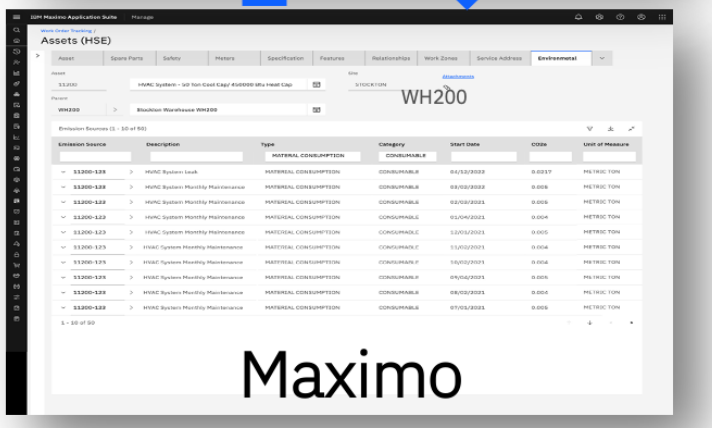
Report

- Envizi can now report Scope 1 fugitive emissions by refrigerant type to support target tracking and reporting for external disclosures
- Envizi can now benchmark refrigerant related emissions across assets to identify outliers
- Envizi can now report refrigerant related emissions savings tied to equipment replacement/maintenance done in Maximo

Adapt

- Maximo can create asset maintenance strategies based on the refrigerant related outlier data received from Envizi





… for ESG Data Management, Reporting and Analytics

Automate the collection and consolidation of 500+ data types, analyze and identify efficiency opportunities and sustainability risks, and report against major, internationally recognized ESG reporting frameworks.

Emissions Management

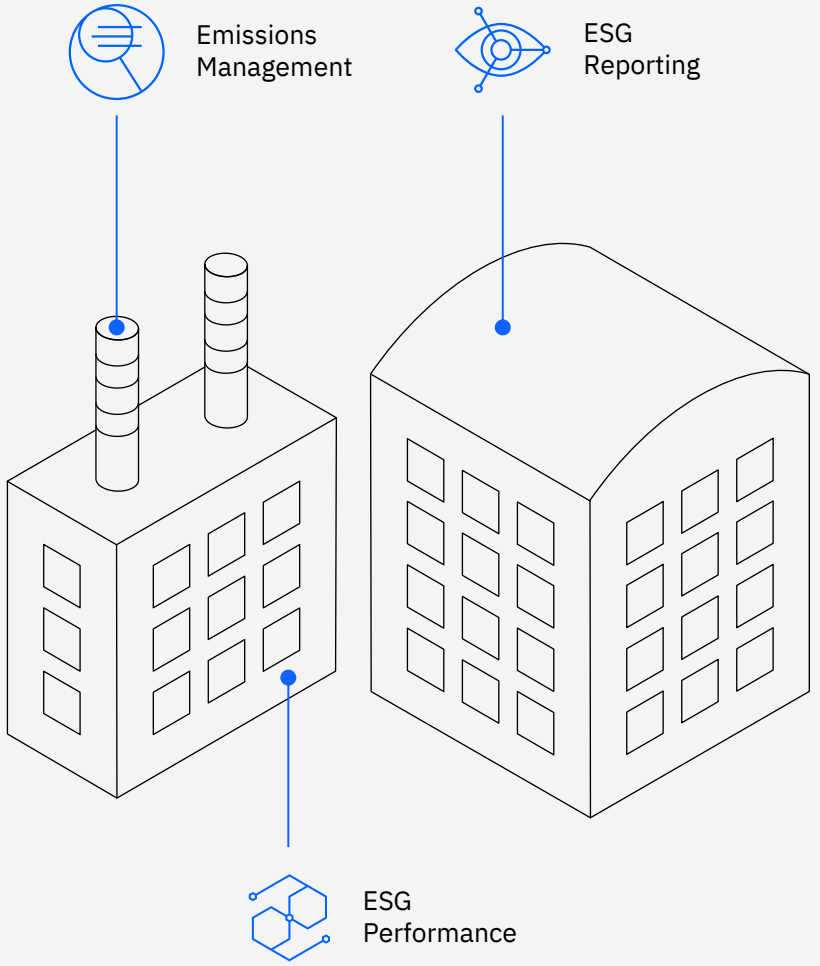
Measure Scope 1, 2, and 3 emissions to identify excessive energy usage or other inefficiencies

ESG Reporting

Streamline ESG disclosures to reduce complexity of ESG reporting and minimize disclosure risk

ESG Performance

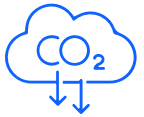
Stand up and track programs for net zero emissions target, analyze utility/energy consumption to identify hotspots



What We Deliver

Envizi simplifies the capture, consolidation, management and analysis of sustainability data.

We support:



Financial-grade Carbon Accounting

Comprehensive ESG Reporting & Disclosure

Tracking of performance to sustainability commitments and goals

Envizi Snapshot

The world's most comprehensive data, analytics and insights platform for Sustainability and ESG

14 yrs.
time in market

150+
total clients

247k
locations connected

150
countries reached

Envizi Provides the Building Blocks to Accelerate Sustainability Performance

Envizi is with our clients' 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.

Build Data Foundation

A single system of record that delivers auditable, financial grade sustainability data

Streamline Reporting

GHG Calculation + Flexible reporting tools to meet internal and external requirements

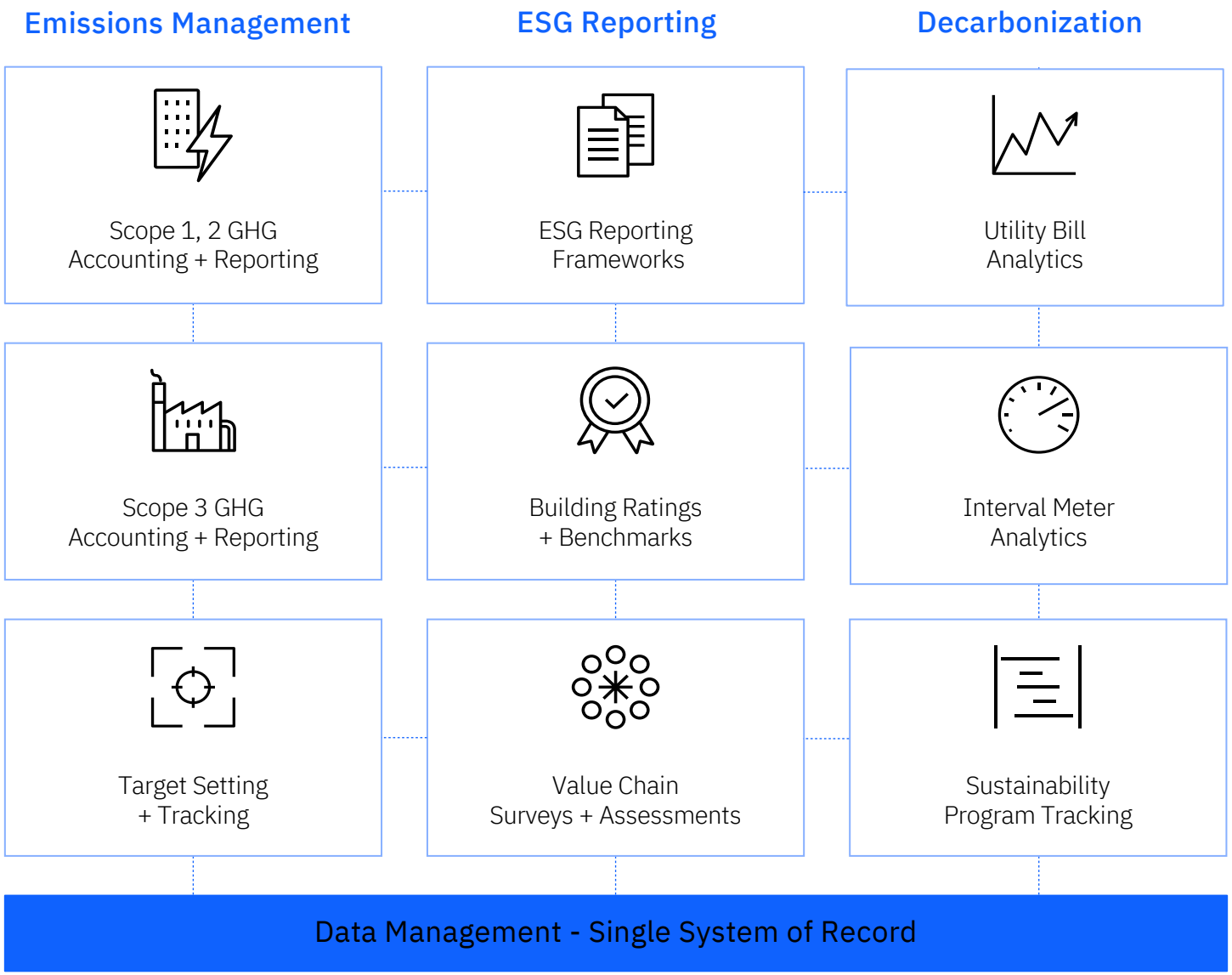
Engage Stakeholders

Integrate internal and external stakeholders, process and technology to embed sustainability into daily operations

Accelerate Decarbonization

Unlock the insights to inform the fastest and most cost-effective pathway to low carbon goals

Envizi Product Framework



How are you capturing, consolidating, and analyzing your sustainability data?

Data

Utility billing data
Electric Gas Water

Transport and stationary fuels
Diesel, petrol, LPG, propane aircraft fuel, LNG, bio-fuel

Refrigerants & fugitive gases
100+ gas types

Electricity produced
Solar, wind, bio-gas, hydro, thermal

Building Management, IoT, and Meter data
NMI meters, smart meters, sub-meters, control signals, sensors

Production metrics
Unit, tonnes, $, litres, hours

Building metrics
m^2, FTEs, occupant hours, building ratings, visits

Weather data
HDD, CDD, rainfall, humidity, irradiation

Certificates & offsets
RECs, carbon effects

Waste & recycling
300+ waste & recycling data types

Materials
100+ material types, construction and building

Transportation
Air travel, taxi, train, car

Fleet and Carrier data
Shipping Costs

Social Data
Community investment, donations, volunteer hours

Company metrics
Headcount, rooms, beds, meals, sales

Governance Data
Diversity, inclusion, equity

Systems

Organizational level
1. ERP (financial)
2. Health & Safety
3. HR
4. Asset Management
5. Supply Chain Management

External frameworks
1. TCFD
2. CDP
3. GRESB
4. SASB

Building level
- BMS/BAS
- Metering

EDGE/ 5G Devices
- Mobile
- IoT Devices
- RFID

Environmental
- Weather Stations
- Radar
- Geospatial
- Satellite imagery
- Geiger-mode LIDAR

Infrastructure

Employee Computers | **Public Cloud** | **Private Cloud** | **On-Prem Data Centers**

Technology

Hybrid multi-cloud

Artificial intelligence

Advanced analytics

Blockchain

5G & mobile technology

Envizi Consolidates Sustainability Data

Powerful ESG data capture

Extensive range of data types

Automatic data capture:

- Bill pay providers
- Data aggregators
- Third-party providers
- Organizational systems
- Market data

Manual data capture:

- Spreadsheets, Kanban boards, web forms
- Survey data

Email, FTP, API

envizi
an IBM Company

Streamlined ESG data consolidation

Auditable single system of record

- Data service hub
- Flexible organization hierarchy

Intelligent data analysis

Dynamic reporting tools

- Standard dashboards
- PowerReport (embedded Power BI)
- Custom Excel reports
- Raw data API

Customizable ESG reporting

Reports for every audience

Driving ESG performance improvements:

- Executive reporting
- ESG performance reporting
- Benchmarking
- Flexible reporting granularity

Meeting disclosure and stakeholder requirements:

- Location and market-based GHG
- Auditing reports
- Trace back to source
- Reporting templates

ESG reporting framework

SASB, Sustainable Development Goals, GRI, CDP, TCFD

IBM Sustainability Software / © 2022 IBM Corporation

IBM is a leading provider in Enterprise Carbon Management Software

Independent analyst firm, Verdantix reviewed prominent carbon management software vendors

- IBM achieved the **highest cumulative score** and is ranked in **the top right of the leader's quadrant**
- The combined power of Envizi + the IBM Environmental Intelligence Suite (EIS) led the analyst firm to conclude that **IBM "should be included on shortlists by enterprise firms seeking a comprehensive and reliable carbon management platform"**
  - **Envizi** achieved the highest scores of any vendor in the categories of Data Quality Control & Renewable Energy Sourcing & Contracts
  - **EIS** achieved the highest scores in climate risk management

verdantix

Green Quadrant For
Carbon Management Software 2022

Source: Green Quadrant: Enterprise Carbon Management Software 2022
Copyright © Verdantix Ltd 2007-2022

IBM Sustainability Software

Questions and Comments

Joe Baker - Senior Sustainability Specialist
Joe.Baker@ibm.com

Russell Bee – Lead Product Architect
Russell.Bee@uk.ibm.com

Tyler Kyburz – Technical Solutions Engineer
Tyler.Kyburz@ibm.com

Valerie Gooch – Business Development Manager
valerieg@us.ibm.com