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Laura received her BS in Mechanical Engineering from Purdue University. Her career has primarily focused on facilities and energy management. In 2015 she became a Certified Energy Manager, when her passion for energy efficiency led her into the world of sustainability. Laura has been with Cummins for 19 years in a variety of roles from site level facility engineer to business segment and regional facilities. Prior to her current role Laura was part of the Global Facilities Functional Excellence team, her primary responsibility was leading the regional and site teams in the implementation of energy projects that supported the company's 2020 energy reduction goal, as well as the management of the building standards and design review process. Laura joined the Environmental Center of Excellence team in 2021 in a role dedicated to supporting the PLANET 2050 Strategy and worked to develop roadmaps for projects focused on meeting the 2030 sustainability goals for facilities and operations. Currently as the Director of ECO Efficiency she leads a team driving the efforts to reduce the environmental impacts of energy, water and waste at Cummins operations worldwide. She also manages the Environmental Strategic Capital budget which funds ECO projects critical to meeting the goals. Laura lives in Columbus Indiana with her husband Scott and their two daughters, Emily who is starting a career as an Actuary and Addison, who is attending Purdue. Laura enjoys spending time with her family and their two dogs doing a variety of outdoor activities including camping, boating, and hiking.

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Cummins Eco- Efficiency Journey: Sustainability Goals, Strategy and Tactics

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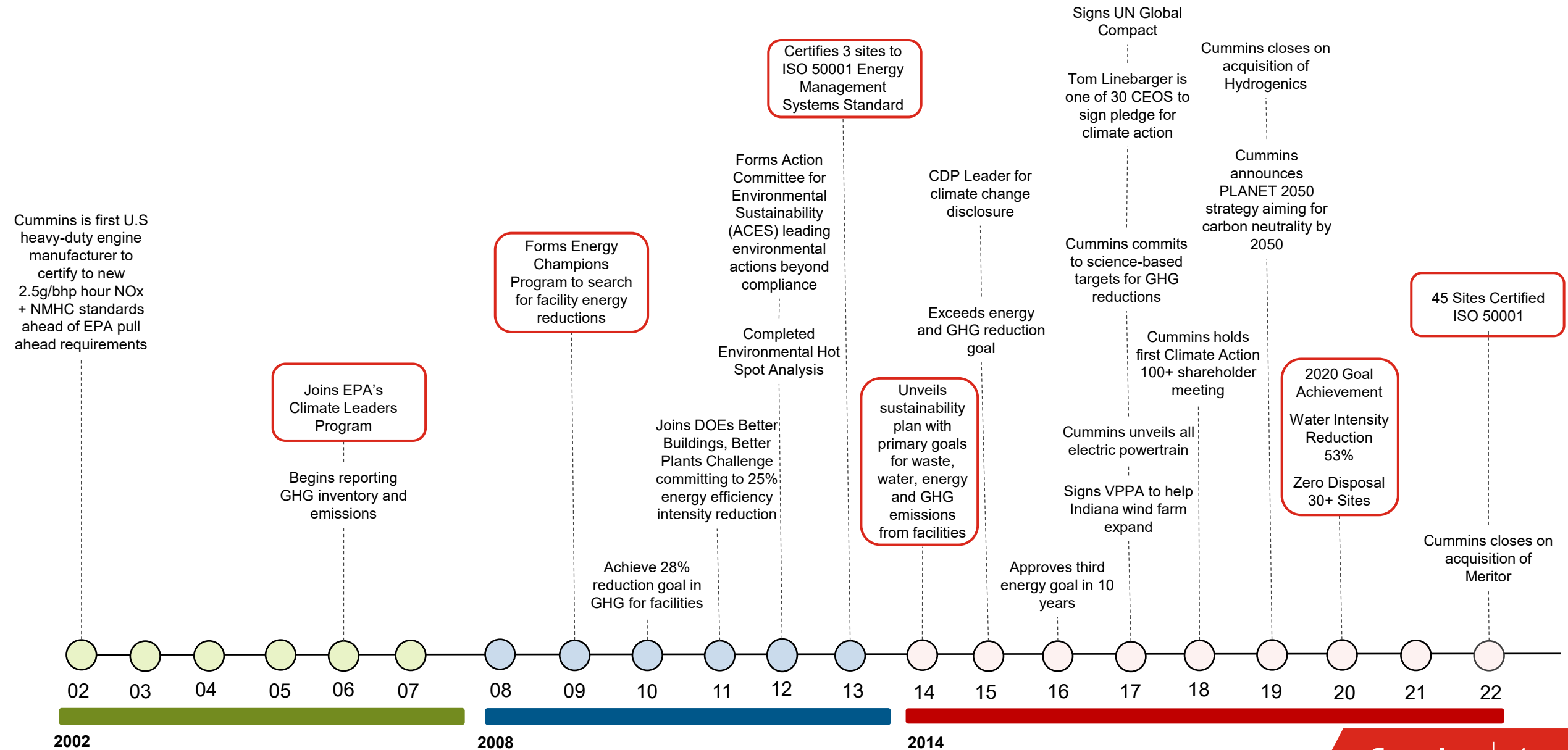
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Public

Cummins ECO Efficiency Journey



Path to Setting Goals and PLANET 2050



**Making people's lives
better by powering a
more prosperous world
requires a healthier planet.**

PLANET 2050

Leveraging our unique skills, experiences, and stakeholder relationships, we are committed to addressing climate change and air emissions, using natural resources in the most sustainable way, and ensuring our communities are better because of our presence in them. We have quantifiable goals for 2030 and visionary longer-term aspirations for 2050.

DESTINATION ZERO

Our strategy to go further, faster to reduce the greenhouse gas and air quality impacts of our products in a way that is best for our customers and all stakeholders.

CUMMINS WATER WORKS

Our initiative to address the global water crisis by strengthening communities through access to sustainable water.



CUMMINS' 2050 ASPIRATIONAL TARGETS

COMMUNITIES ARE BETTER BECAUSE WE ARE THERE

2050 TARGETS:

- Net positive impact in every community where Cummins operates.
- Near zero local site environmental footprint.

DOING OUR PART TO ADDRESS CLIMATE CHANGE AND AIR EMISSIONS

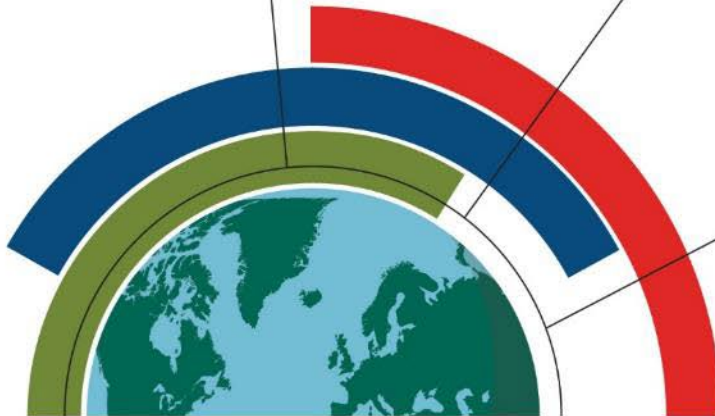
2050 TARGETS:

- Customer success is powered by carbon neutral technologies that address air quality.
- Carbon neutrality and near zero pollution in Cummins' facilities and operations.

USING NATURAL RESOURCES IN THE MOST SUSTAINABLE WAY

2050 TARGETS:

- Design out waste in products and processes
- Use materials again for next life
- Reuse water and return clean to the community



NOTE: Company facilities include all consolidated operations and joint ventures that are part of the Cummins Enterprise Environmental Management System. The company's strategy also includes addressing environmental needs in communities where Cummins employees live and work and where the company does business. Those goals are under development.

NINE 2030 GOALS

SCIENCE-BASED TARGETS

- Reduce absolute greenhouse gas (GHG) emissions from facilities and operations by 50%.
- Reduce scope 3 absolute lifetime GHG emissions from newly sold products by 25%.
- Partner with customers to reduce scope 3 GHG emissions from products in the field by 55 million metric tons.
- Reduce volatile organic compounds emissions from paint and coating operations by 50%.

CIRCULAR ECONOMY

- Create a circular life-cycle plan for every part to use less, use better, use again.
- Generate 25% less waste in facilities and operations as a percent of revenue.
- Reuse or responsibly recycle 100% of packaging plastics and eliminate single-use plastics in dining facilities, at employee events and as amenities.
- Reduce absolute water consumption in facilities and operations by 30%.
- Produce net water benefits that exceed Cummins' annual water use in all Cummins regions.

P2: A Principle behind PLANET 2050

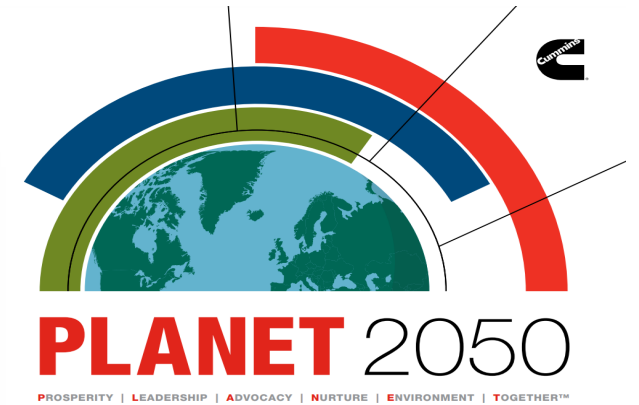
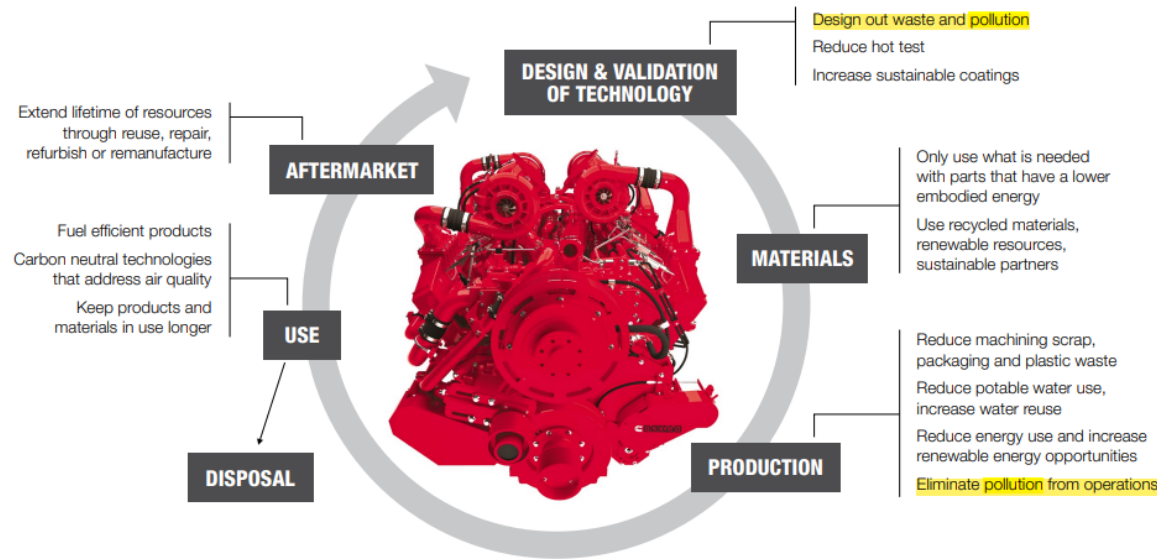
THE SIX PRINCIPLES BEHIND PLANET 2050

1. Develop innovative technology solutions that result in sustainable outcomes
2. Partner to solve complex problems
3. Design out waste and pollution
4. Reuse resources at their highest value for as long as possible
5. Connect inspired employees with meaningful action
6. Advocate for regulations that are tough, clear and enforceable

LIFECYCLE ANALYSIS

Cummins' Action Committee for Environmental Sustainability (ACES) is comprised of functional, business and regional leaders from across the company. Since early 2012, its focus has been to look at the company's environmental impact using the lens of the full product lifecycle, from design and manufacture to end of life. In each phase of the cycle, we asked ourselves:

How might we lessen our environmental impact?



Our Goals cover three major priorities:

1. Addressing climate change and air emissions
2. Using natural resources sustainably
3. Partnering so that our communities are better because we are there



PLANET 2050

The Details

PLANET 2050 Critical Xs



GHG/ Energy

- Energy Efficiency
- Compressed Air Reduction
- Production EOL and Engineering Testing
- Manufacturing Technology
- Environmental Monitoring
- Renewables
- Fleet EVs



Water

- Wastewater Reuse
- Water Use Monitoring and Efficiency
- Fire Test Water Reuse
- Irrigation Reduction



Waste

- Returnable Packaging
- Manufacturing & Service Process Waste
- Circular Lifecycle Plan for Every Part
- Single Use Plastics elimination



Pollution Prevention

- Engineering Controls
- Secondary Containment
- Infrastructure Upgrades
- Underground to Aboveground
- Stormwater Engineering Controls
- Decommission Tanks

Paint & Coating VOC: Legacy and New Products

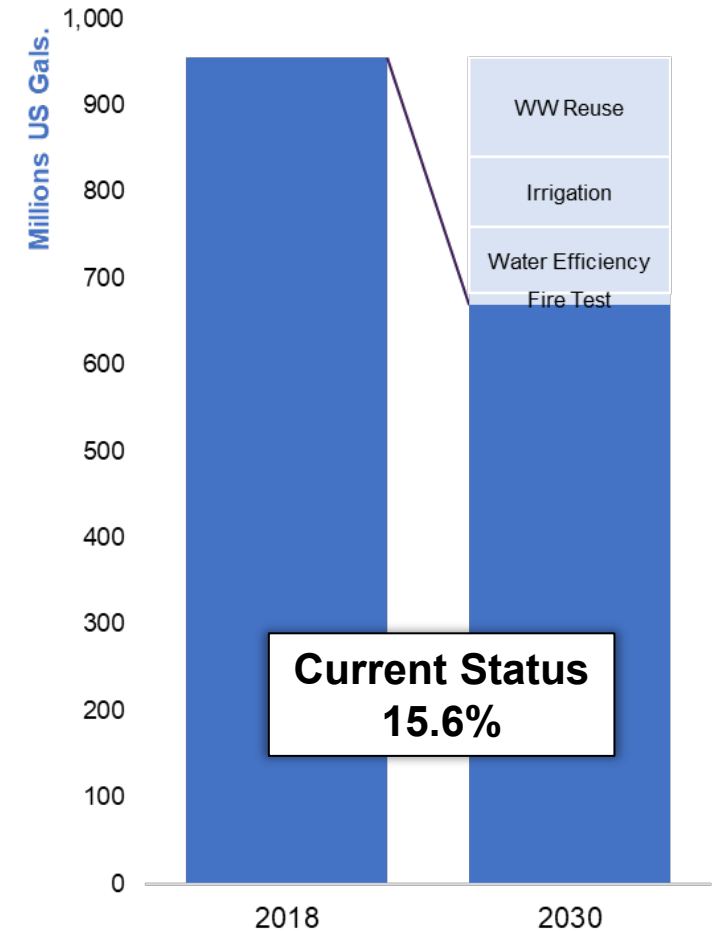
Facilities and Operations Water Reduction

30%

Reduction in absolute water consumption in facilities and operations

Water Critical X's

- Irrigation
- Fire System Test
Water reuse
- Wastewater treatment
and reuse
- General Efficiency



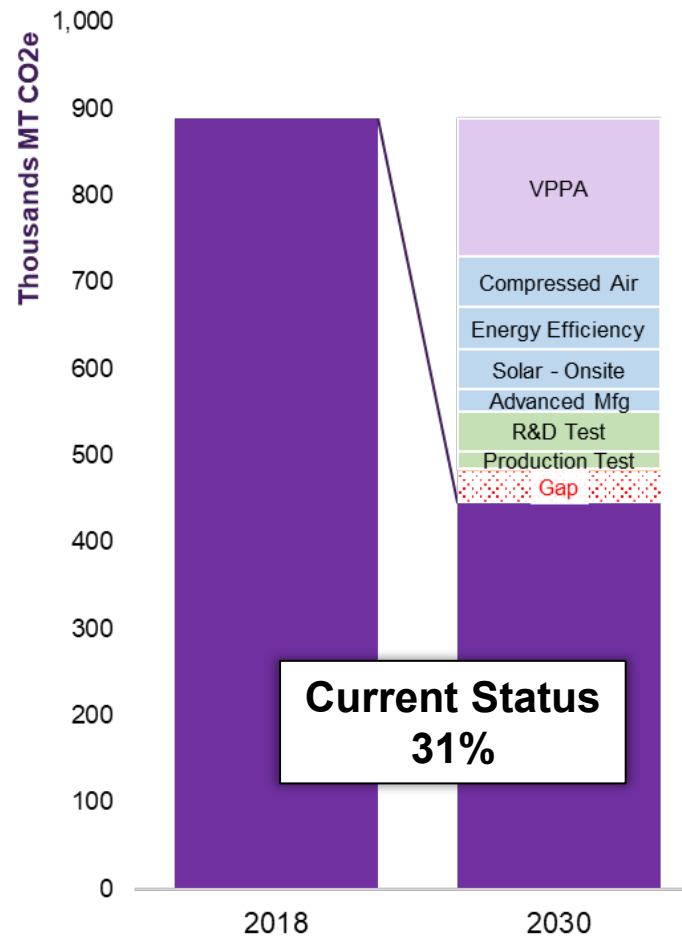
50%

Reduction in absolute GHG emissions from facilities and operations

Facilities and Operations GHG Reduction

GHG Critical X's

- Energy Efficiency
- Compressed Air
- Production EOL and Engineering Testing
- Advanced Manufacturing Technology
- Renewables (onsite, offsite)
- Environmental Monitoring
- Fleet EV



25%

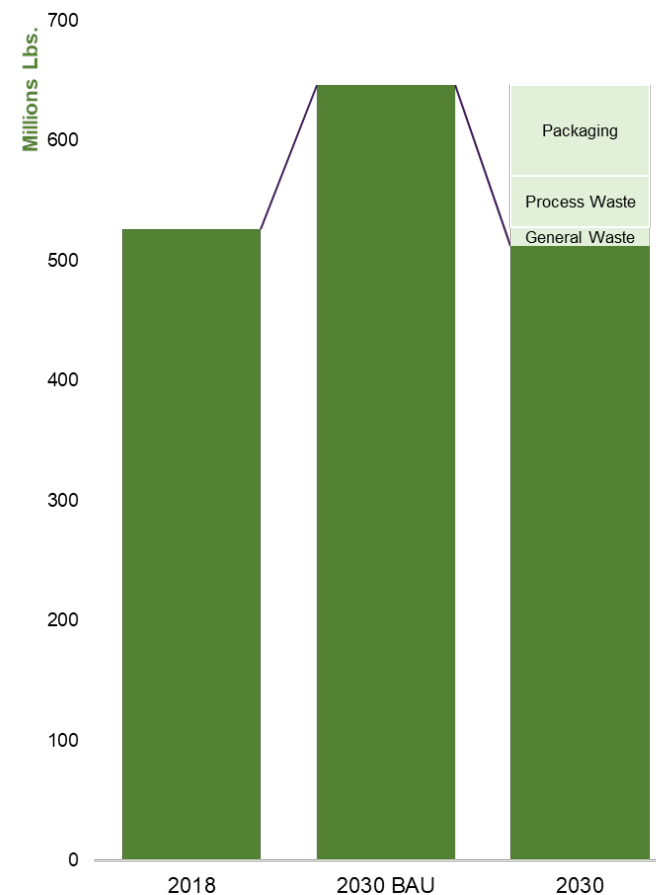
Generate less waste in facilities and operations as part of revenue



Facilities and Operations Waste Reduction

Waste Critical X's

- Packaging
- Process Derived
- General Refuse
- Single-use Plastics





50%

Reduction of volatile organic compounds emissions from paint and coating operations

VOC Reduction Performance

- **2022 Status with acquisitions: -34%**
- Cummins has a mix of sites using solvent- and water-based paints and resins.
- Some sites have transitioned to water-based materials and/or installed air emission abatement systems to comply with stringent local regulations.
- Goal can only be achieved if major sites move to water-based paint.
- Work to resume to define feasibility plans with these sites to switch to low VOC paint.

0

Near Zero Pollution

Facilities and Operations Pollution Prevention (P2)

P2 Critical X's

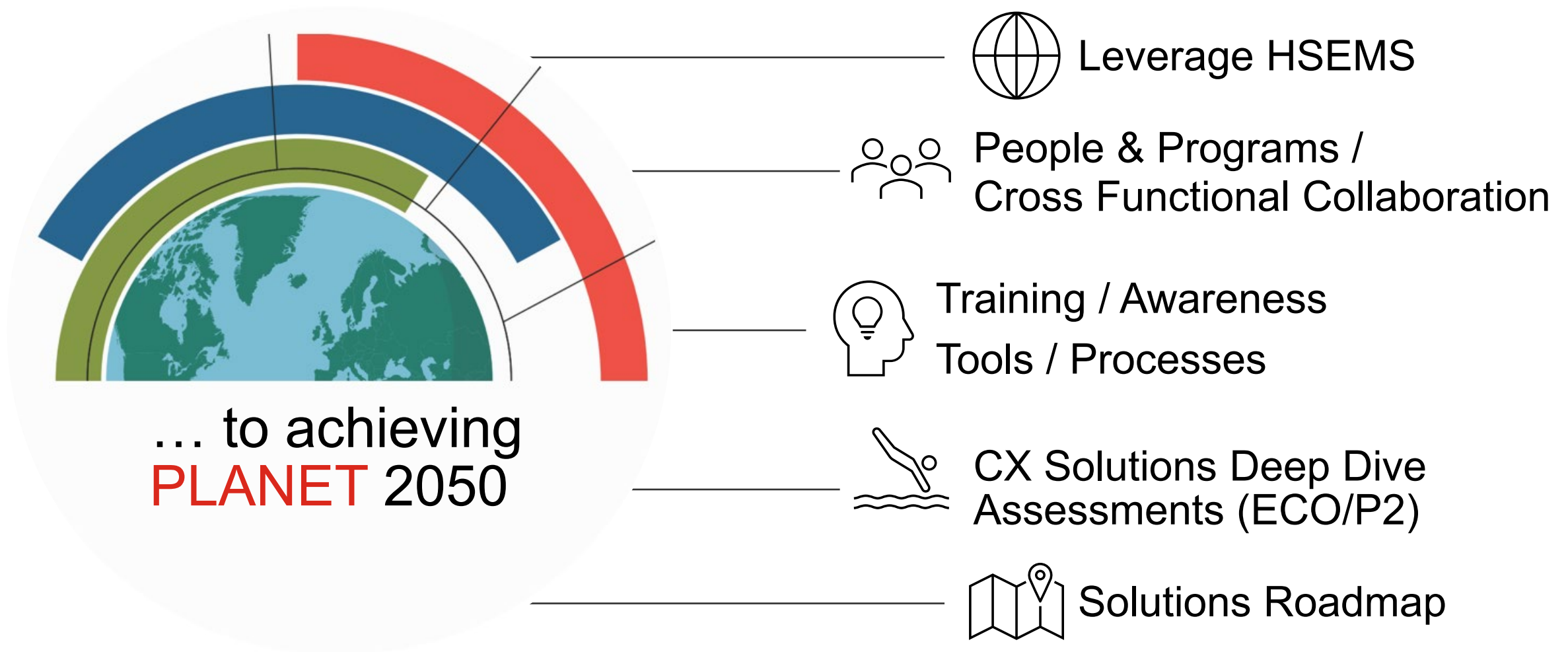
- Bulk Fluids Management
 - Engineering Controls
 - Secondary Containment
 - Infrastructure / Asset Upgrades
 - Underground to Aboveground
 - Stormwater Engineering Controls
 - Decommission Tanks

Near Zero
Pollution



The Path to Achieving PLANET 2050

The Path ...



Health, Safety and Environmental Management System: Delivers on HSE Policy Commitments

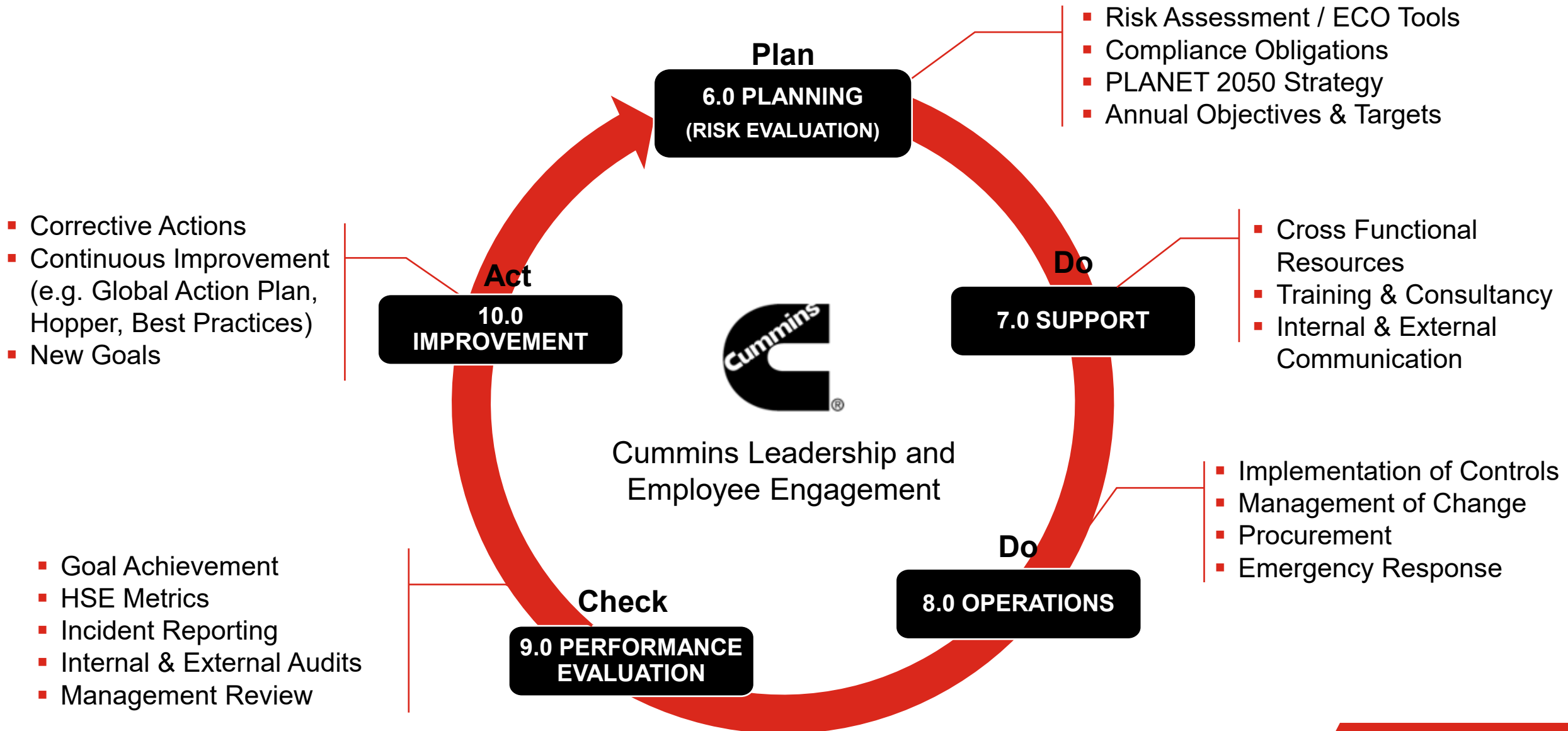
HSE Policy Commitments

Cummins' leadership will facilitate this mission by providing the necessary resources and information to meet aggressive improvement targets in the areas of:

- illness and injury prevention;
- health and wellbeing promotion;
- pollution prevention;
- comply with legal requirements;
- commit to natural resources conservation.



HSEEnMS: Framework to Manage Risk & HSE Work!



Roles & Responsibilities / Collaboration

Site CFT



- CFT = Cross Functional Team
- Develops project list and support project leaders
- HSE + SME provide guidance

Site Project Leader



- Leads all aspects of a project
- Reports to Site Leadership and ROT on project status

ROT P2 Leaders



- HSE + SME
- Support sites
- Track project status
- Attend monthly ECOE / ROT Forum

ECOE



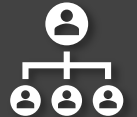
- Collaborate with ROTs and Key Stakeholders
- Supports with strategic funding

Key Stakeholders



- Various stakeholders (GIS, Finance, consulting partners, etc.)
- Support Strategic Projects

Leadership



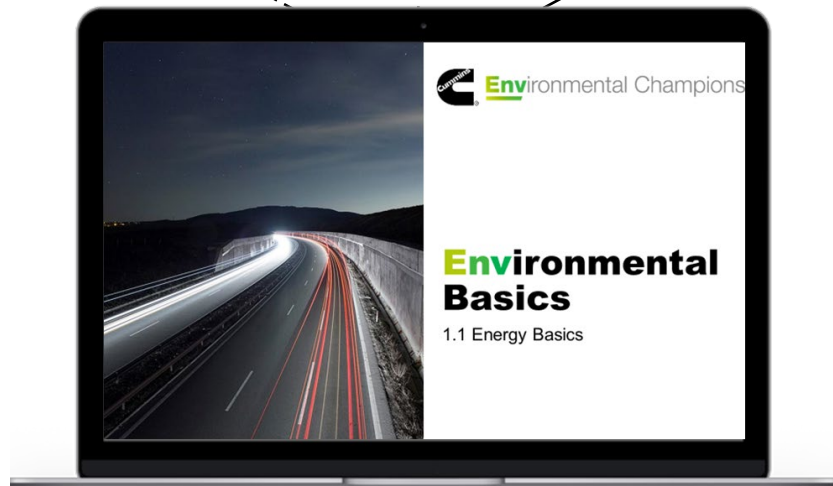
- Understand business impact
- Highlight importance of work
- Remove roadblocks

People and Programs / Training & Awareness

Environmental Champions



266 Trained Employees



June **Env**ironment Month



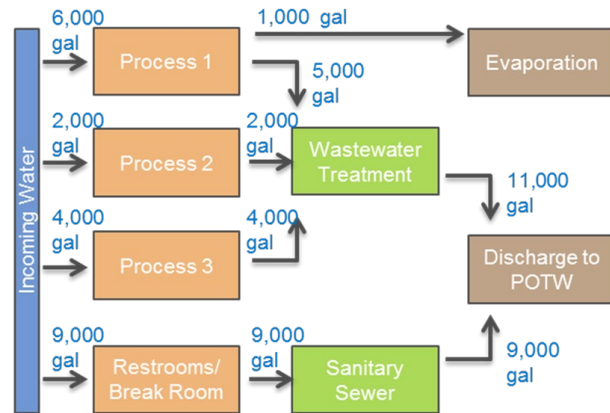
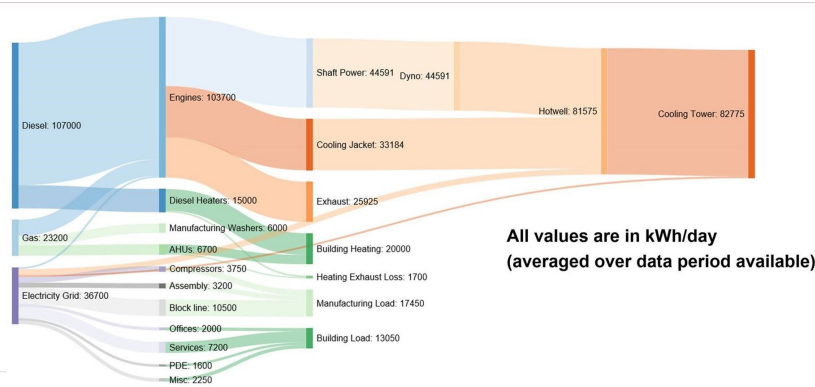
Influencer Program

Globally **Env**olved
Cummins Environmental News



Innovation Gateway

Tools and Processes



Significance No.	Significant Waste Stream	% of Total Waste Generated	Current Management Method:	Revision Date: 02-01-17					Total:
				Waste Stream Quantity	Associated Waste Cost	Environmental Impact / Hazardous Nature	Ability to Influence - Waste Hierarchy	Regulatory Requirements	
1	General Waste	15.2%	Landfilled	9	9	9	9	3	297
2	Wood	30.3%	Burned for Energy Recovery	9	9	3	3	9	243
3	Food Waste	4.0%	Burned for Energy Recovery	3	3	3	9	9	219
4	Corrugated Fiberboard	10.1%	Recycled	9	3	3	3	9	213

Energy Review Tool

Water Conservation & Performance Tool

Waste Review Tool

Holistic View of our facility and operations environmental footprint



Site Environmental Balance
Sources vs Consumption.
Determine Significant Users to drive corporate campaign approach



Project Identification
Prioritize Low – No cost and capital projects across medias

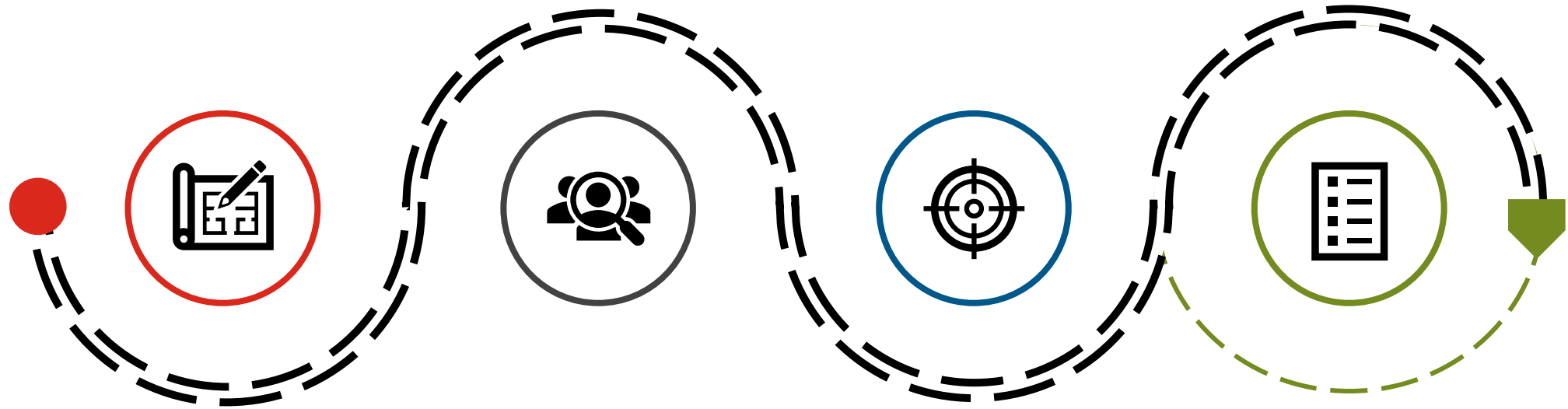


Engage with Workforce
Trainings, communications etc. for significant users



Identify trends and anomalies
Understand deviation causes and discover opportunity areas

Solution Roadmap Process

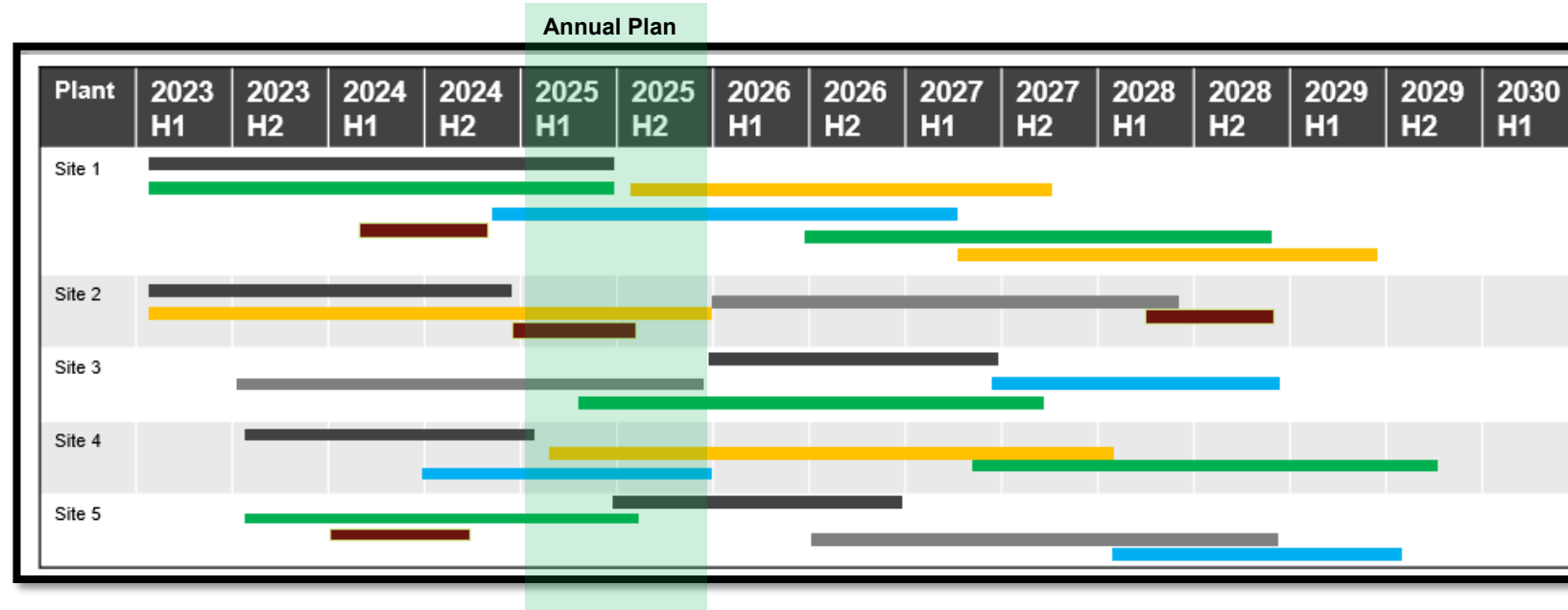


PLANNING (ECOE/ROT/BU)	DEEP-DIVE (ECOE+ROT)	ROADMAPPING	DELIVERY PLAN
<ul style="list-style-type: none"> • Priority site identification • Site data review/3-year plan mapping • Solution focus per site • Stakeholder matrixes 	<ul style="list-style-type: none"> • On-site workshop • Solution review • Site risk log • Business growth / changes 	Critical X's scope projects <ul style="list-style-type: none"> • Cost • Savings • Resource • Timeline • Risk Mitigation 	<ul style="list-style-type: none"> • Planned projects implemented • Follow PLANET 2050 project execution process
Q1	Q2 / Q3	Q3 / Q4	Annual Process







Critical X Solutions Roadmap Example

What's Included

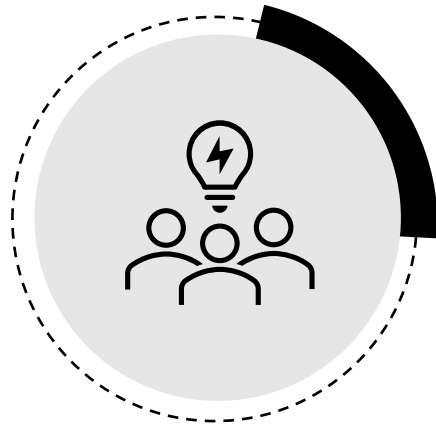
- Defined Projects:
 - Solution applicability
 - Site specific projects
 - Site risk/priorities
 - Full CMI plan
- Defined Resources:
 - People/PMs
 - \$ (Capital)
 - \$ (Expense)
- Defined Savings
 - Energy/ GHG
 - Payback
 - \$/ mt CO2e



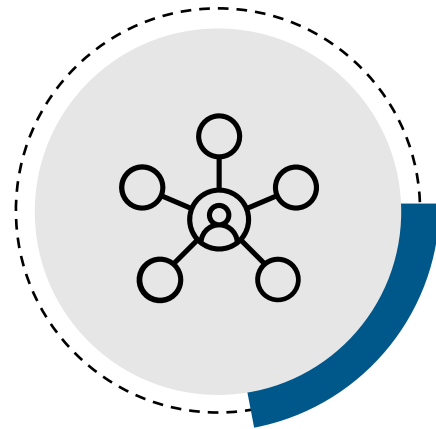
Solution Examples

-  GHG: Compressed air elimination
-  GHG: Process heating optimization and controls
-  Water: Cooling tower process optimization
-  Water: Process water reuse
-  Waste: Returnable packaging
-  P2: Overflow monitoring

ECO Efficiency Journey



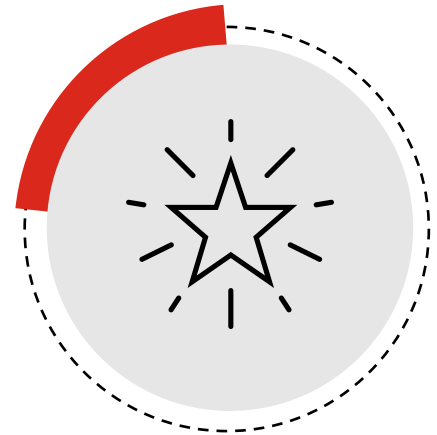
Vision



Communicate



Collaborate



Achievement

Q+A

