

# Deliver net zero savings faster

Grid Edge Cloud

**SIEMENS** 













### Deliver net zero savings faster with Grid Edge Cloud

#### **Embrace**

rising expectations

and escalating risks

in a changing world



Avoid



unintended consequences of today's divergent net zero solutions

Visualize



your potential savings (or losses) – 13% of profits for one of our customers Adopt



the new way, the holistic transition to net zero with cloud

Deploy



the new cloud architecture across your own assets – reach net zero faster Let's both



commit to conducting an assessment of your potential savings



# **Embrace rising expectations and escalating risks** in a changing world

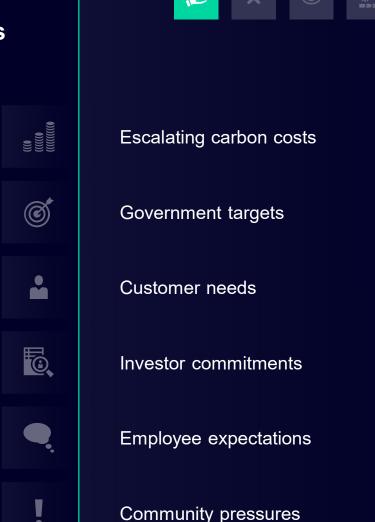
"Climate risk is INVESTMENT RISK"

- Blackrock

#### **"4X HIGHER CARBON COST**

by 2030 for many industry plants"

- Siemens



### **Avoid unintended consequences** of todays divergent net zero solutions

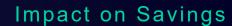
## **Divergent Silos**

#### **Diverse**

- Sites and regions
- Hardware and tools
- Stakeholders/expectations
- Vendors and systems
- Teams and KPI

#### Operational Inefficiency

- Lack of synergies and trade-offs
- Low-quality decision making
- Barriers to department coordination
- Wasted hardware investments
- Low visibility of efficiency gains
- Behaviour drift inefficiencies







INCREASING Risk to Security of Supply



SLOWER to ESG Targets















# Visualize potential savings (or losses) 13% of profits for one of our customers

		$CO_2$		€ m	
1	Monitoring and analytics	6%		5.4	Based on 6% reduction in electricity consumption
2	Consumption and asset optimization	10%		8.9	Based on 10% reduction in electricity consumption
3	Renewables and infrastructure integration	30%		7.2	Based on 4 cents/kWh reduction from generating 30% renewable
4	Power* flexibility optimization	10%	量食	8.9	Based on 10% reduction in electricity consumption. *Self-generated power (e.g., CHP, PV, microgrid)
	Grid and site monetization	2%		0.4	Based on selling 5% of self-generated renewables at 4 cents gain
+	Extra synergy boost available			9.2	Additional 30% synergy boost available if the full five module holistic strategy is adopted

**Total Saving** 

58% CO<sub>2</sub>

€40 m

Equivalent to 13% of 2021 profit for an example customer

Assumptions: Energy cost is 3% of revenue | Electricity cost is 75% of total energy cost | Benefits are estimated on a conservative level | Operating profit of €300 m | 1 kWh Electricity = 0.4 kg CO<sub>2</sub>



# THE OLD

#### silo-based approach

- Narrow site level tactical improvements
- Short term evaluation of opportunities
- KPI delivery focused at site/asset level
- Divergent management of assets, tools & KPI
- Hardware led approach

# THE NEW

#### holistic transition

Corporate-wide 10 - 20% profit saving equivalent1 strategic improvements Long-term supply Avoid escalating and asset optimization carbon costs KPI delivery embraces Prevent wasted all stakeholders hardware investments Unifying management Higher guarantee of assets, tools & KPI of reaching net zero Avoid costly Cloud led approach reputational damage

1 Tailored savings assessment recommended





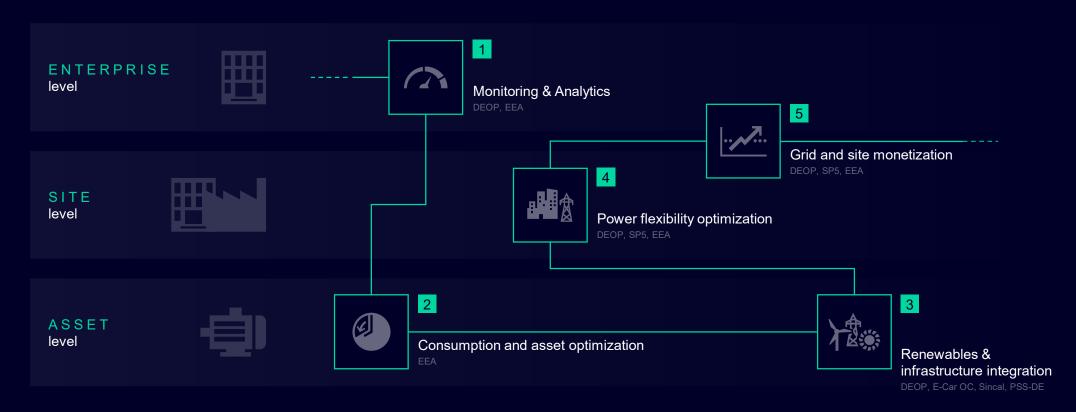






# 干

# **Deploy the new Grid Edge Cloud architecture across your own assets**Reach net zero faster



Consulting on Global Adoption (PTI) + Support on Global Deployment -















# Let's both commit to conducting an assessment of your potential savings

Within 1 week

**Jointly commit** (with a Letter of Intent) to conducting a multi-site assessment of your potential savings

Within 6 weeks

**Collect data** required for savings estimate from across your teams

- Monitoring and analytics data
  - Consumption and asset optimization data
- Renewables and infrastructure data
- Power flexibility optimization data
- Grid and site monetization data

Within 8 weeks

**Meet senior management** to share and discuss results of the savings assessment and solution



# **Grid Edge for Gestamp, Spain**

- 21 factories in 8 countries
- > 1200 assets connected
- Open system Integration of chargers from different suppliers
- Load management is a standard feature
- Value added via roaming
- > >100 measures implemented per year



**SIEMENS** 

# Grid Edge Contact me:

Published by Siemens 2021

**Arturo Banderas Fuhrmann** 

Head of GX Global Sales

Mobile: ++49 (173) 9186804

E-mail: arturo.banderas fuhrmann@siemens.com

siemens.com

Restricted | © Siemens 2021