

Microgrids

contributing to the Energy Transition

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Life Is On

Schneider
Electric

The new energy landscape has changed
how we produce, integrate, and use
electricity

- From linear **fossil fuel supply** and **demand**
- to a cleaner energy **supply** with **increasing renewables...**
- ... and **prosumers** feeding a **bi-directional, flexible grid**
- Increasing **Electrification** is reducing dependency on fossil fuels
- And **digital technology** is driving **demand optimisation**

There is a higher demand for Energy across all sectors



Scope 2 and 3 Emissions



The rising cost of energy



Power Reliability



Increasing Grid Complexity



Prosumerism

Decarbonising supply is only one side of the energy coin



Replace
energy supply
45%*



Offsite renewables purchasing
PPAs



Onsite renewables generation
Solar, microgrid, storage

*Contribution to net-zero energy by 2050

We need to look at both sides... and tackle **demand**



Design & Build for Low Carbon

3D-6D BIM design to reduce embodied carbon



Measure, Monitor & Save

Connected systems and software for real-time data, insights and automation



Circularity for sustainability

Choose green by design, with extended life, efficient usage & clean disposal options



Electrify Everywhere

From transport to heat to industrial processes...
Reduce fossil fuel demand by transitioning to electric



Reduce

for energy and operational efficiency and circularity

25%



Electrify

processes

30%

*Contribution to net-zero energy by 2050

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Microgrids provide **3 integrated outcomes** for Prosumers

Reliability

- MAINTAIN power supply during outages
- ENSURE continuous operations
- EXPAND site power capacity






Economic Performance

- CONSUME energy when prices are low
- IDENTIFY saving opportunities
- EARN revenues from energy markets

Sustainability

- INTEGRATE renewable energy sources
- ELECTRIFY operations
- REDUCE and track sustainability

Microgrids can tackle different needs

		 Economic performance	 Resilience & independence	 Sustainability
Renewable Integration	Cut off scope 2 emissions by consuming green and local			<input checked="" type="checkbox"/>
Economic Arbitrage	Control local DERs based on utility tariff scheme	<input checked="" type="checkbox"/>		
Self consumption	Consume as much as possible from local DERs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Non wire alternative	Add local capacity in order to cope with the increasing power demand	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Back up power	Increase site's resilience by adding local back up power		<input checked="" type="checkbox"/>	
Grid Ancillary services	Monetize site's flexibility by participating in Demand Response and/or FFR mechanism to help grid stability	<input checked="" type="checkbox"/>		

Questions? Let's Talk

Do you want to know more about Microgrids? Let's accelerate the decarbonization and optimization of the built environment, towards a resilient future powered by technology, together!

Meet today's speaker:



Frank-Helmut Wehner

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