



a Framework for Achieving Sustainability in Data Centers

Erik Gjesdal, Segment Manager C&SP, Schneider Electric

Life Is On

Schneider
Electric



Speed

Emerging digital world



Sustainability

Net-zero to satisfy market demands



Reliability

Maintaining uptime

C-level attention

99%

of large company
CEOs: “sustainability
is important for
business success.”

(Harvard Business Review)

Need for action

49%

of world annual
GDP\$39T, is covered
by jurisdictions
legislating for net-
zero emissions.

(Energy and Climate Intelligence Unit
(ECIU))

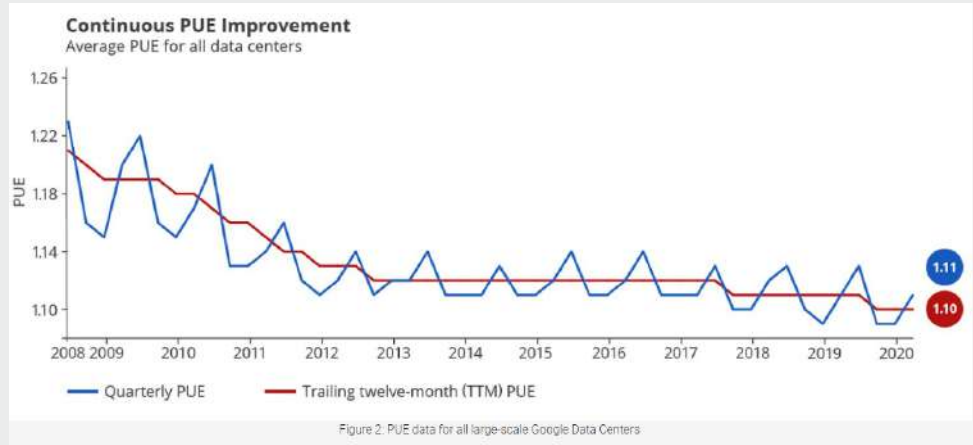
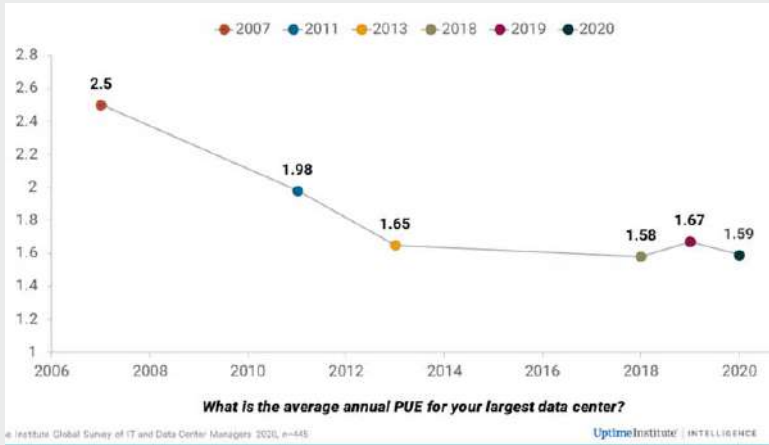
Investor expectations

75%

of investors:
sustainability
performance is
important when
making decisions.

(MIT Sloan Management, Investing
for a Sustainable Future)

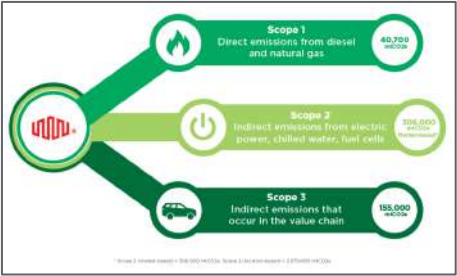




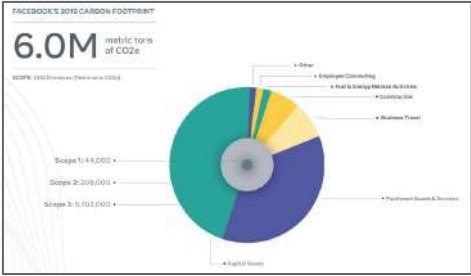
... Arguably, we're hitting diminishing returns.

Scope 1, 2, and 3 reporting

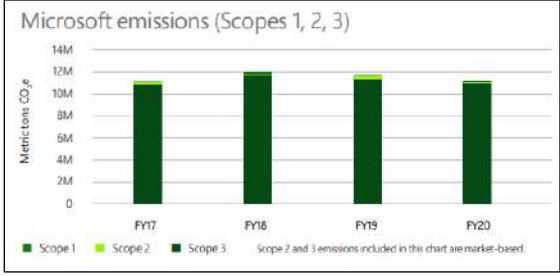
Equinix



Facebook

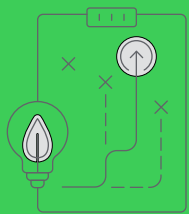


Microsoft

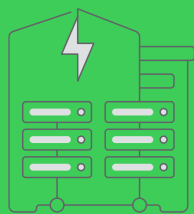




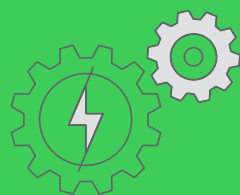
GLOBAL 100



Set a bold, actionable strategy



Implement efficient data center designs



Drive efficiency in operations

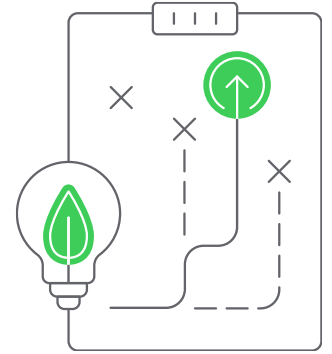


Buy renewable energy



Decarbonize supply chains

Set a bold, actionable strategy

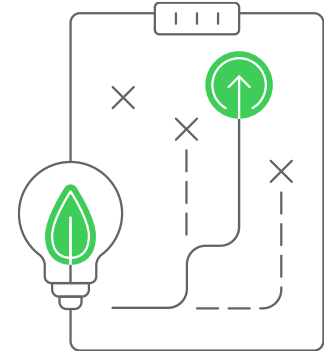


Life Is On

Schneider
Electric

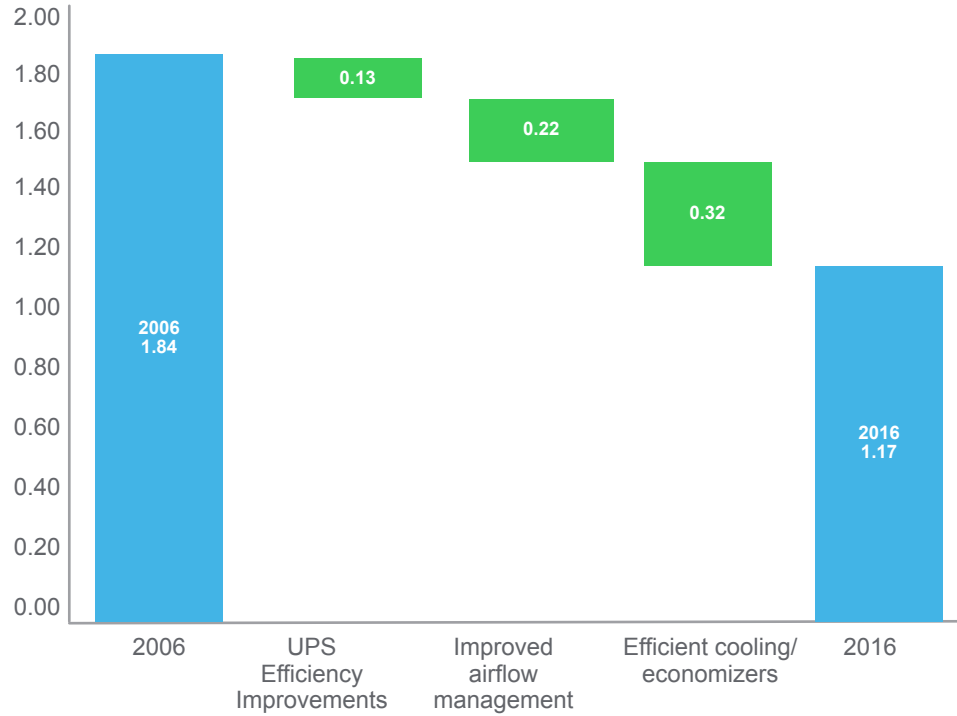
3 pitfalls

- Lack of corporate strategy
- Misalignment of internal expertise
- Lack of business case



Implement efficient data center designs

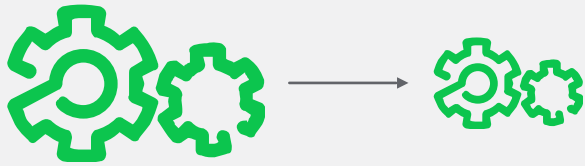




Source: Schneider Electric™ analysis, presented at DCD London, 2017

And we need to prioritize circular design

Design for



Reduced size and weight

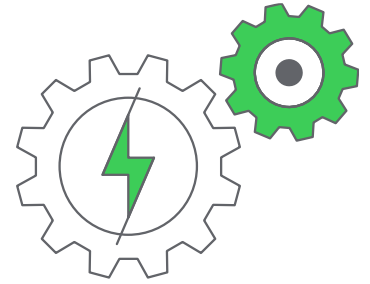


Serviceability



Second life

Drive efficiency in operations



The data center of the future will have ...

- More interaction with the grid
- Greater power variability with IT
- More complex cooling architectures

... and more sites to manage ...
done with the same or less staff.

all





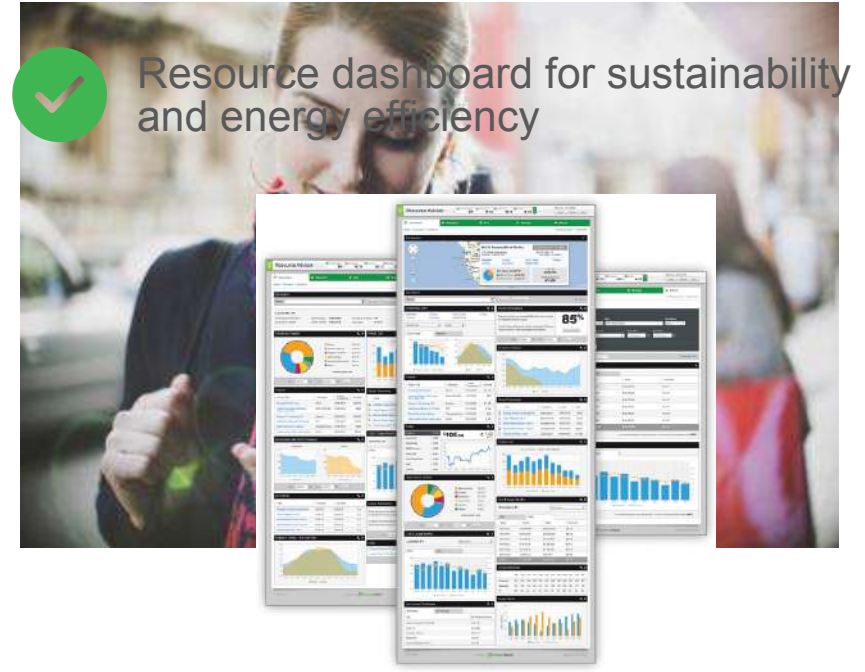
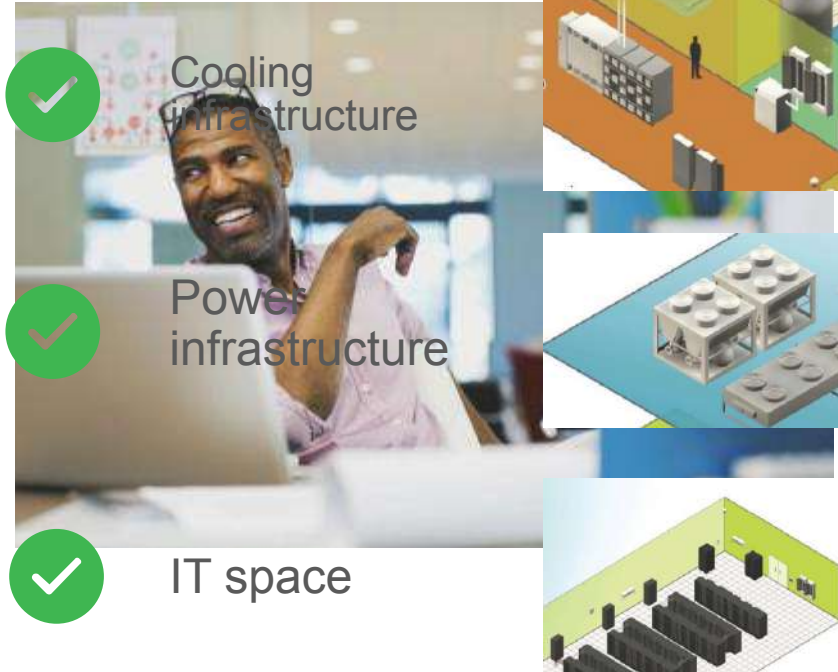
Connected systems



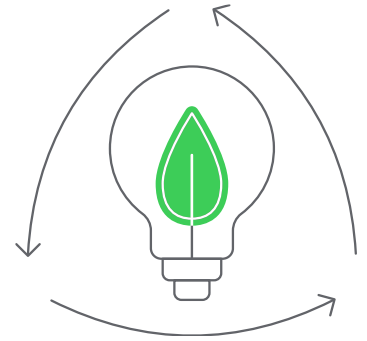
Software and analytics



Lifecycle services



Buy renewable energy



Decarbonize supply chains



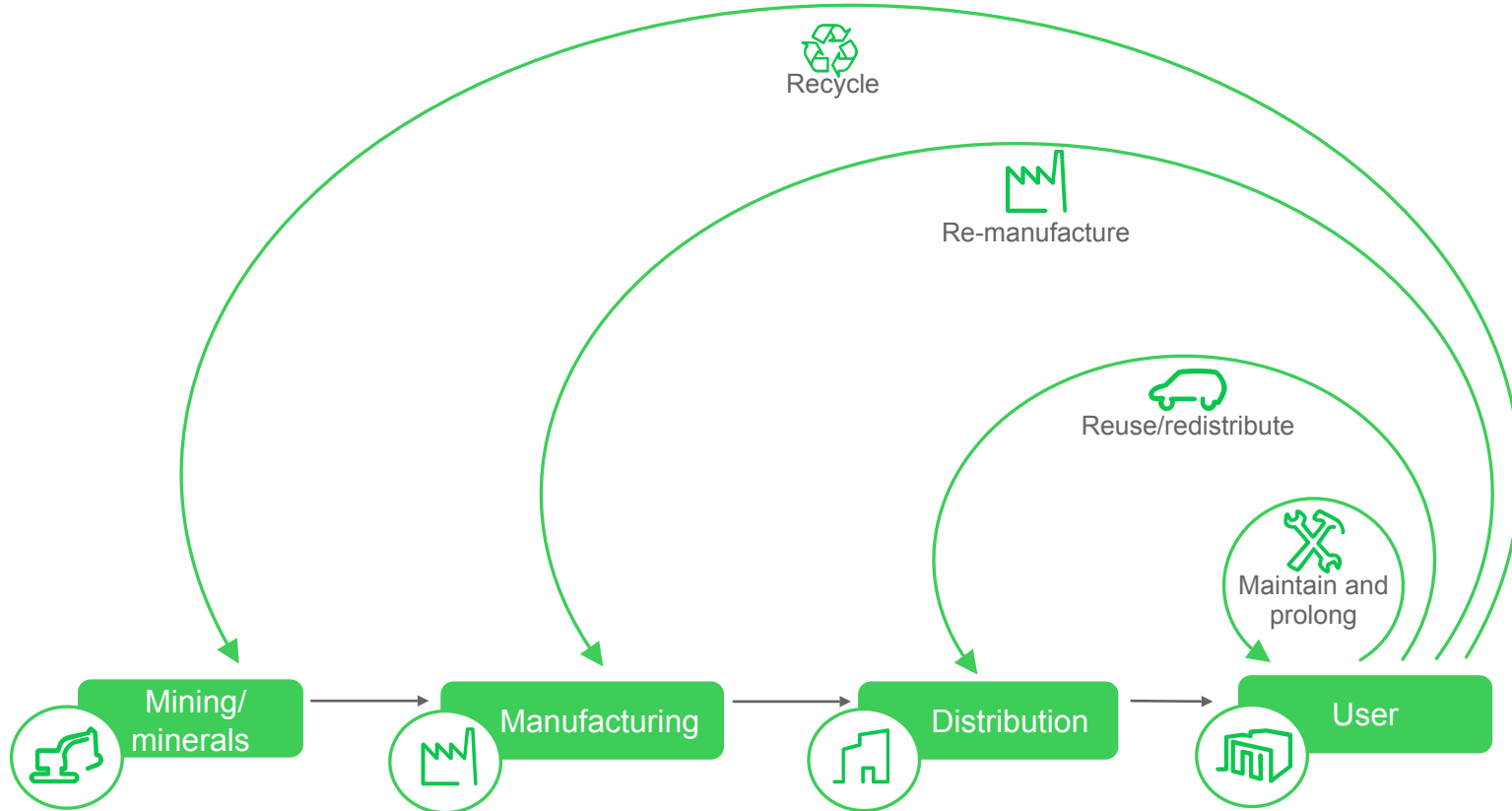
Example of how to achieve Scope 3 emissions goals over time

Scope 3 is significant:

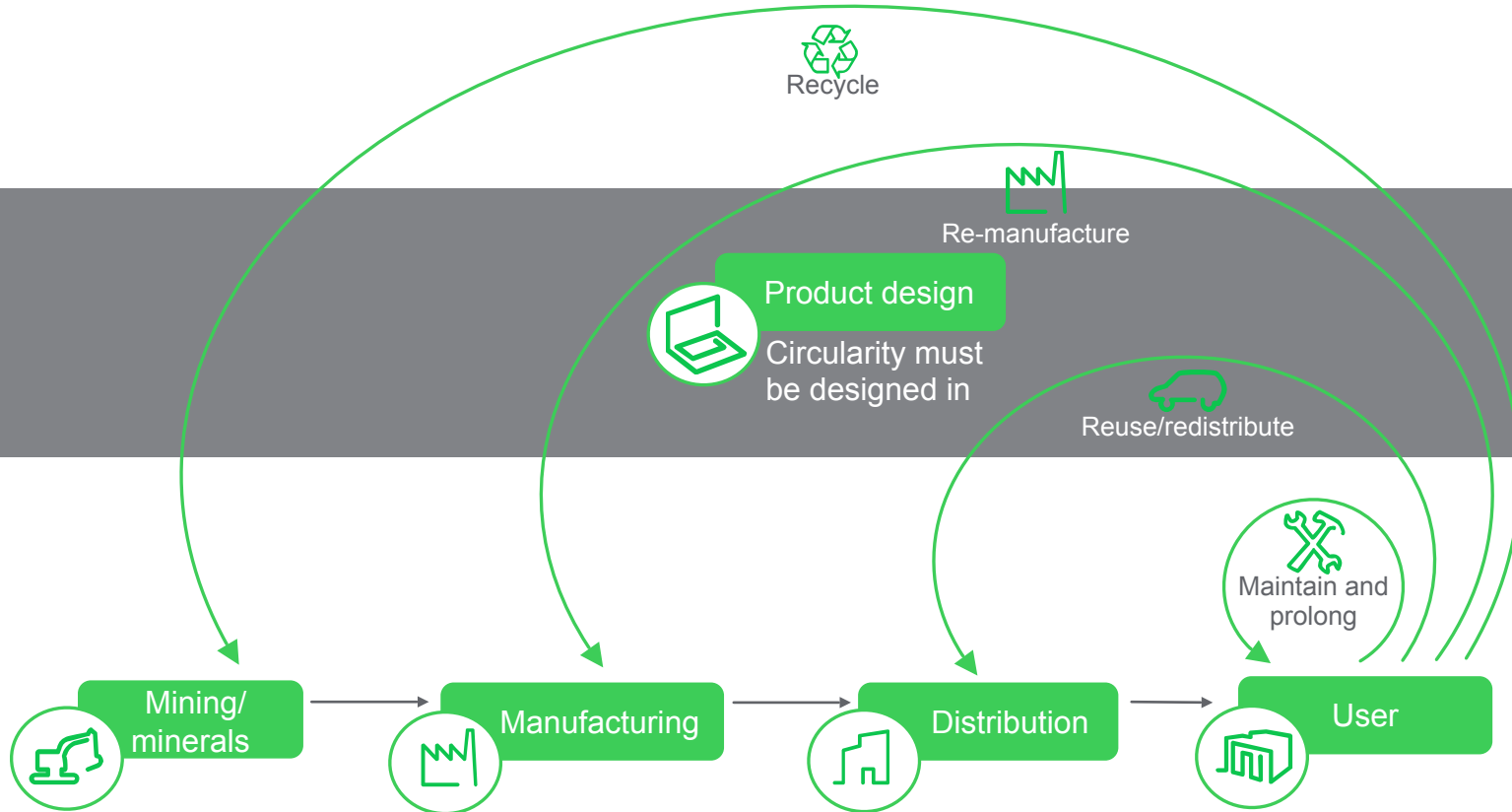
- Facebook's is 96% of total
- Schneider's is 99% of total
- Your supply chain's Scope 1 and 2 are part of *your* Scope 3

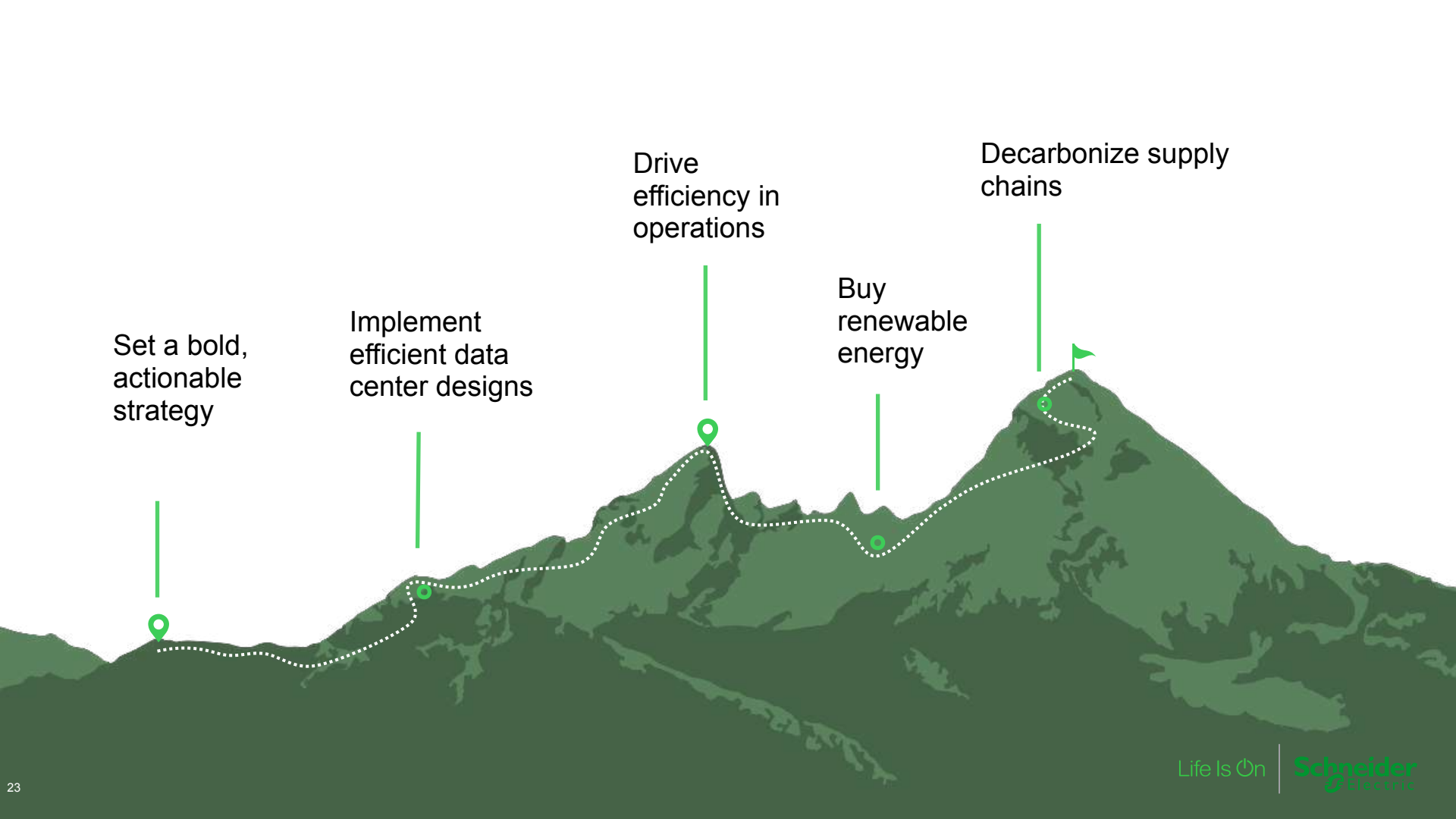


Use vendors that embrace circular economy



Use vendors that embrace circular economy.





Set a bold,
actionable
strategy

Implement
efficient data
center designs

Drive
efficiency in
operations

Buy
renewable
energy

Decarbonize supply
chains

Guide to Environmental Sustainability Metrics for Data Centers

White Paper 67



Life Is On

Schneider
Electric