Meeting EU sustainability target by applying system engineering to Data Center life cycle management

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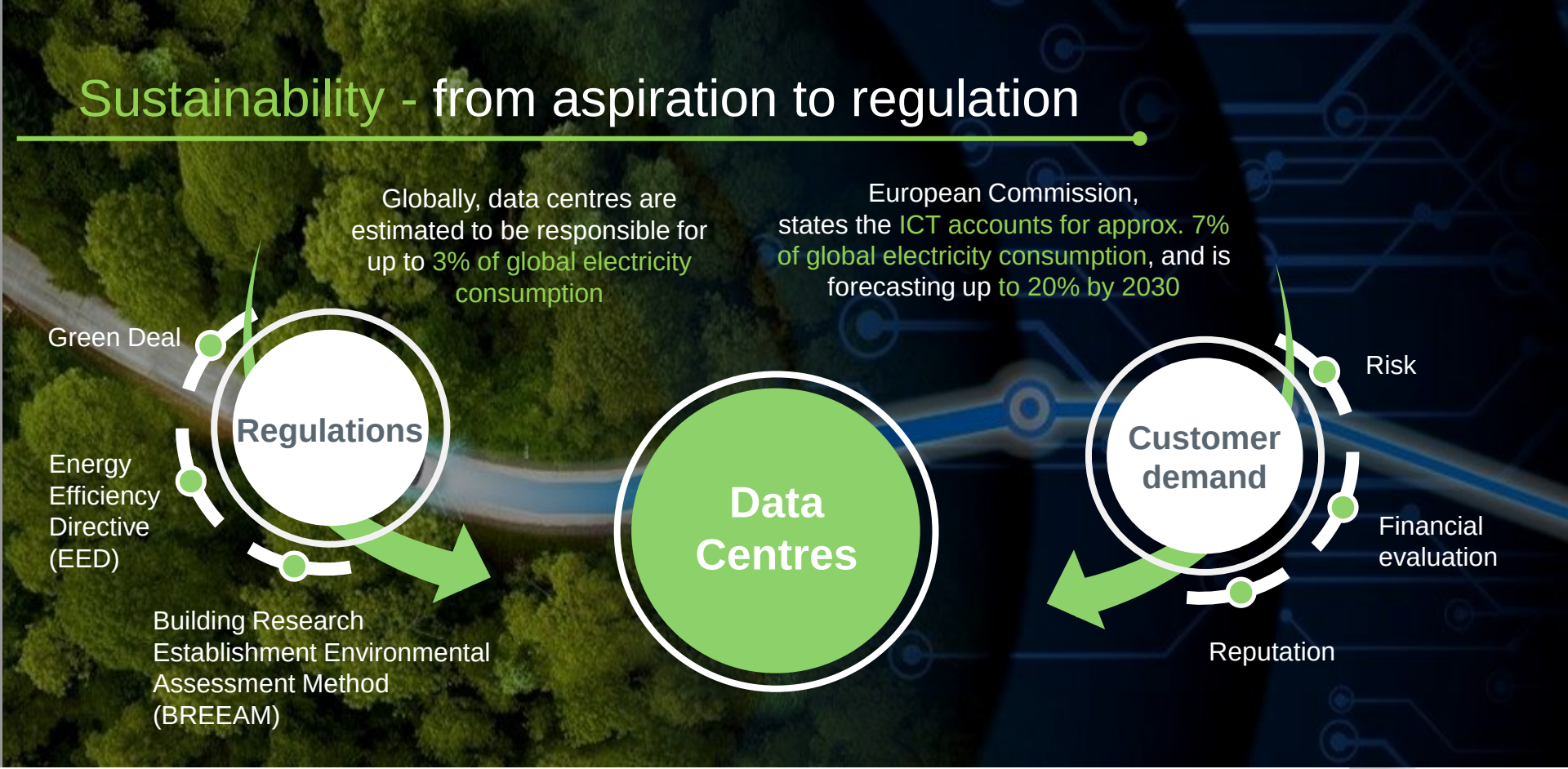
16 november 2023
1931 Congrescentrum 's-Hertogenbosch

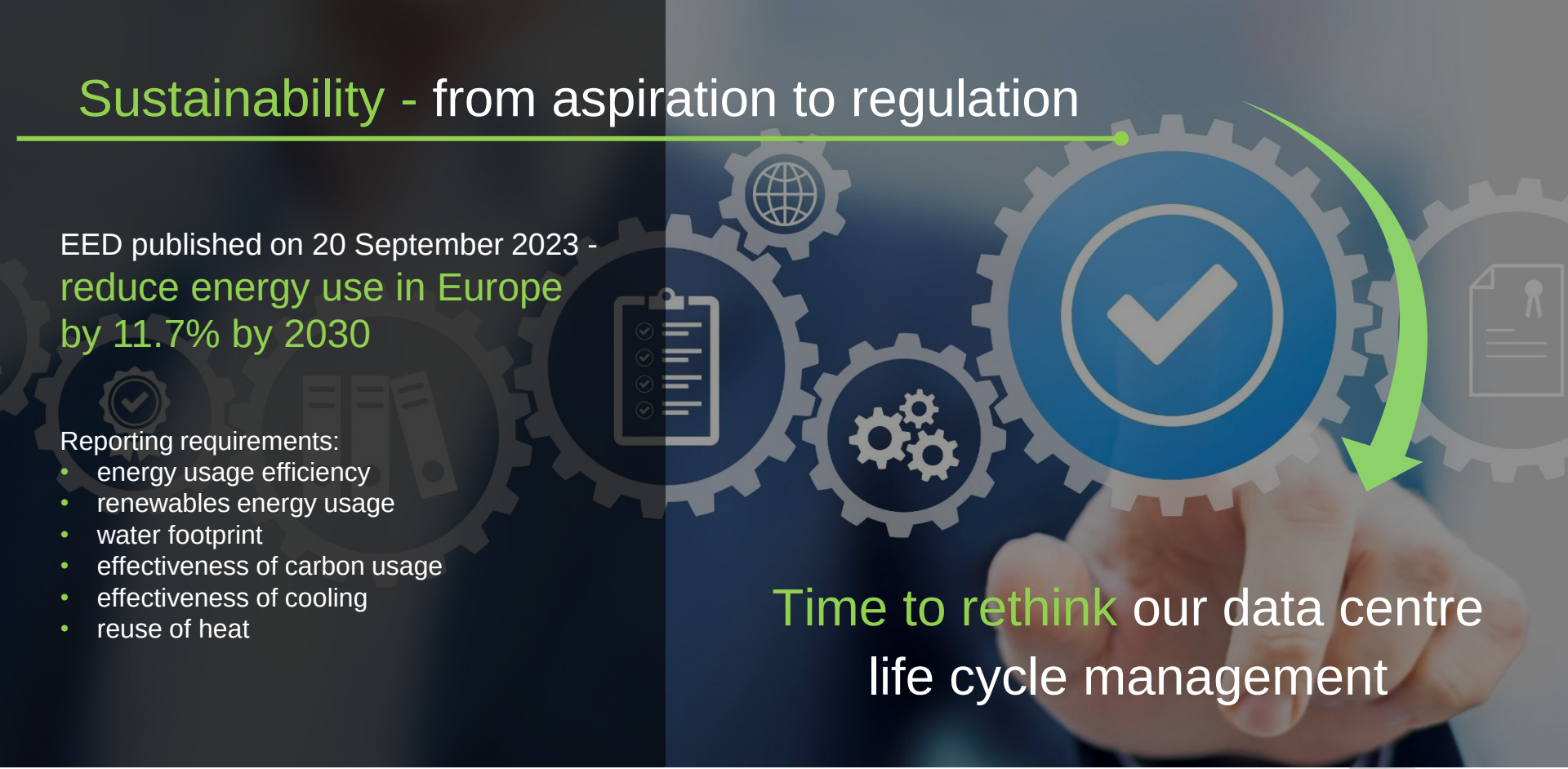
Sustainability - from aspiration to regulation



Sustainability - from aspiration to regulation

EED published on 20 September 2023 -
reduce energy use in Europe
by 11.7% by 2030

Reporting requirements:
- energy usage efficiency
- renewables energy usage
- water footprint
- effectiveness of carbon usage
- effectiveness of cooling
- reuse of heat



Time to rethink our data centre life cycle management

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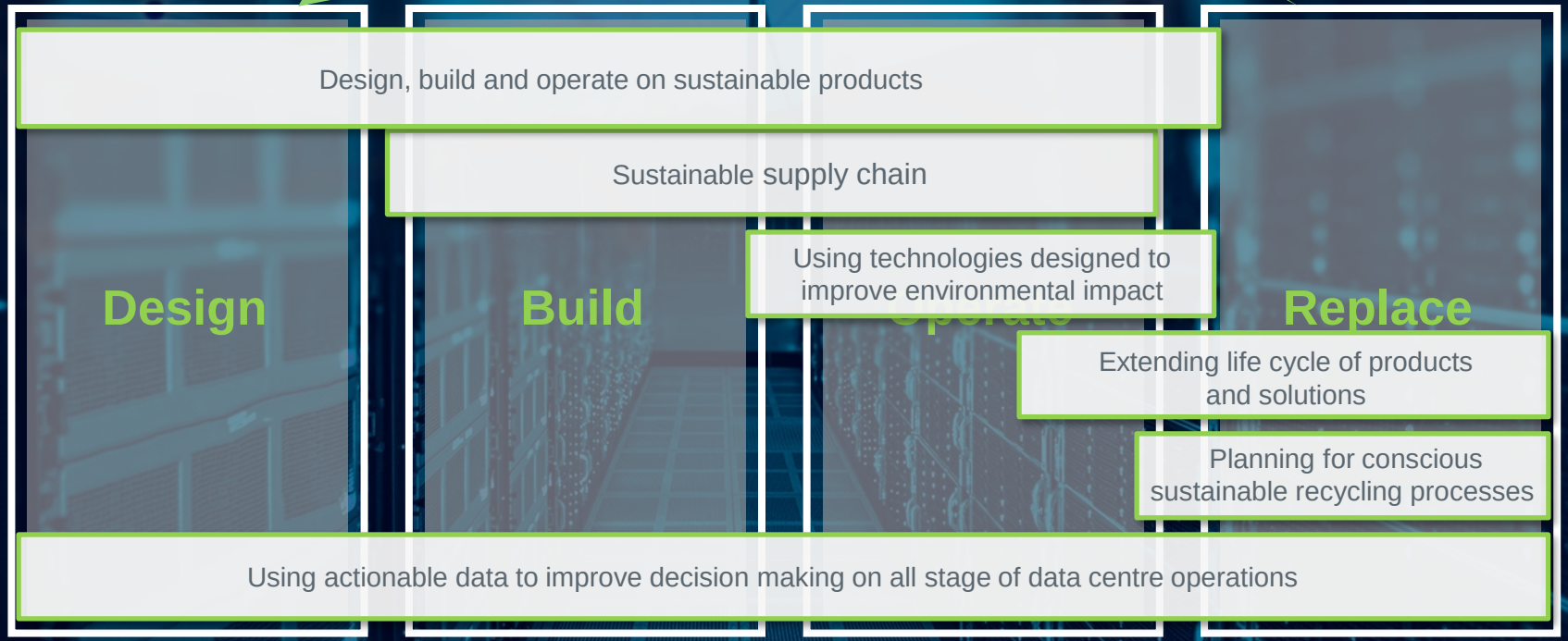
Design, build, operate and replace for a sustainable future



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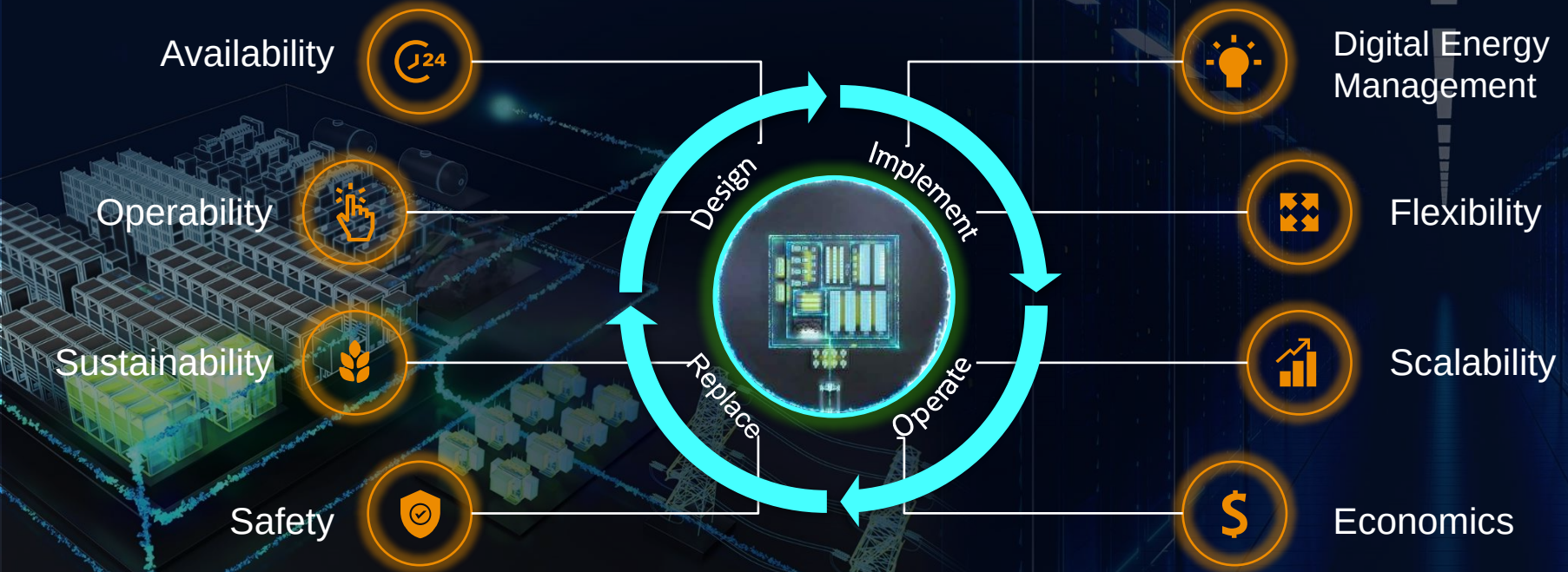
Systems engineering approach driving TSO



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Actionable data was never so important before

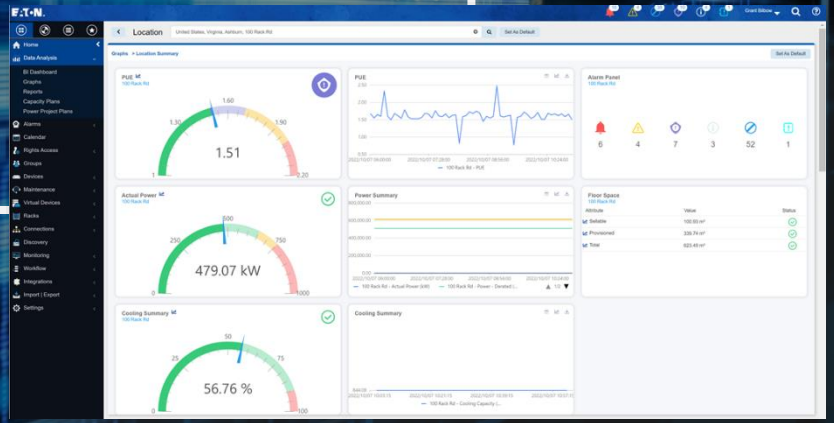
Collect all data for optimal data centre performance

Automate action to meet the current performance indicators

Intelligent data analysis for sustainability metrics PUE, WUE, CUE etc

Machine learning to automate actionable data and optimise data centre performance

Artificial Intelligence to predict future state for continual improvement and growth



Grow your business through intelligent data analytics

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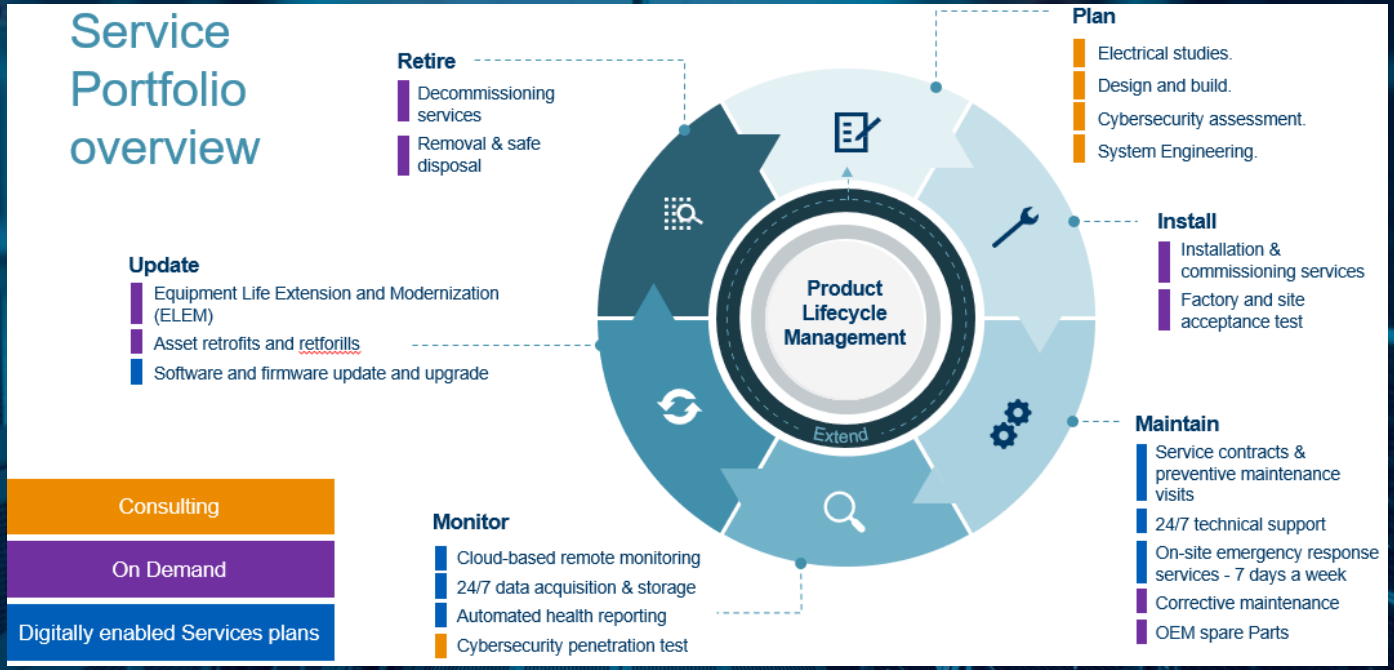
Brightlayer Data Centres suite

Whole Life Management Service



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Component condition monitoring

Know your system to the core

Real-time data of system status

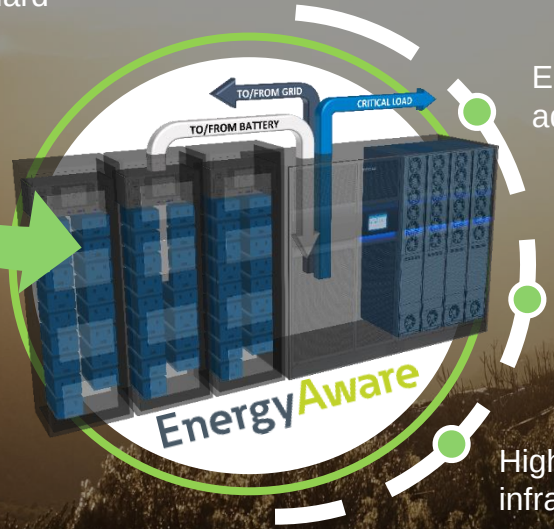
To avoid UPS load loss by providing insights on component condition and taking appropriate and timely service action

1. Core component condition sensing
2. Timely pre-emptive maintenance
3. Faster troubleshooting

Reactive → **Proactive** → **Predictive**

Energy efficiency as the key to save the planet

High Efficiency UPS (97.5% Online Mode) further **reduces losses by 40%** from industry standard



Enabling and increasing the adoption of renewables

Utilisation and smarter use of existing assets to provide flexibility with no impact on primary function

Higher utilisaton rate of distribution infrastructure

Eaton EnergyAware extends **sustainability within and beyond the walls** of the data centre

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Sustainability - Obligation or enabler for commercial success?

Energy savings remain central in sustainability as the cleanest energy is the one we do not consume!

Sustainability acts will also be enablers for commercial success!

- New revenue streams
- Added customer value – matching sustainability targets
- Faster speed to market
- More financial options i.e. green financing
- Lower operational expenses in environment with fluctuating energy prices

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www.eaton.com/sustainability