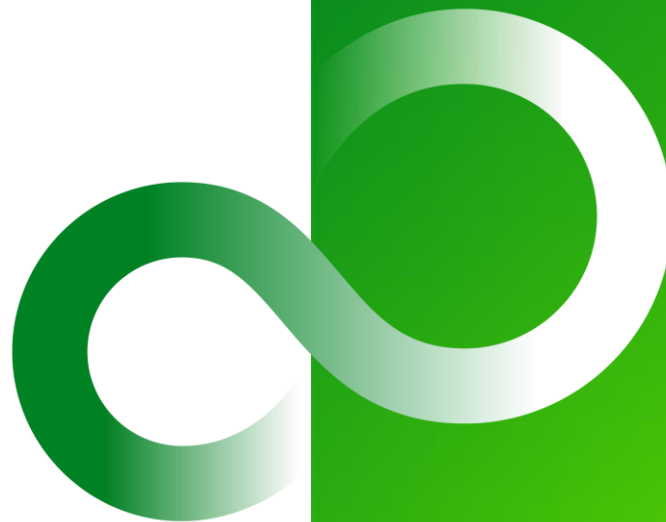


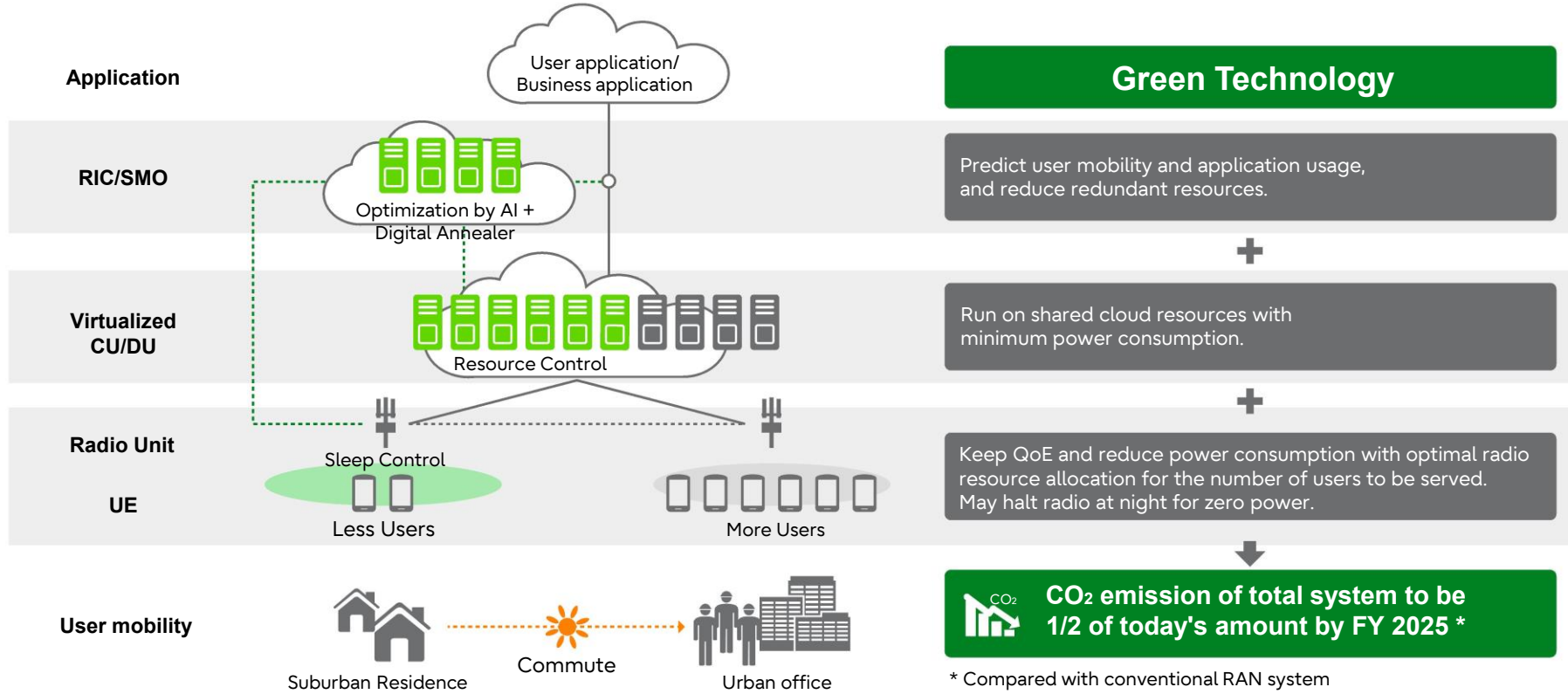
Fujitsu 5G system green technologies

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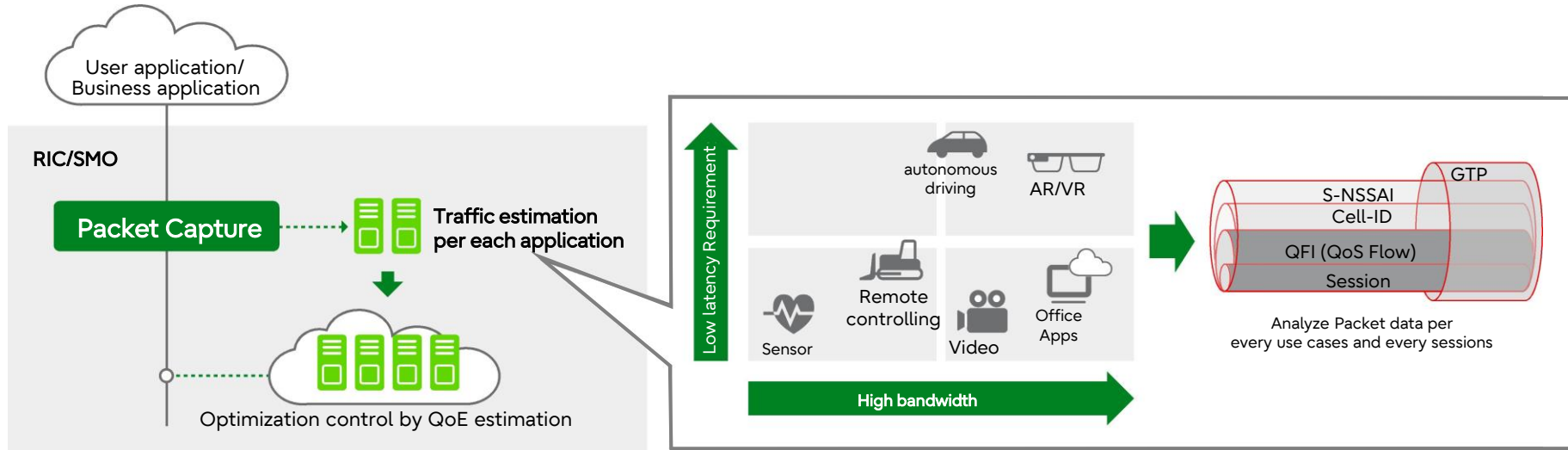
Based on prediction of user behavior and usage



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RAN Control by Estimating Users QoE (Quality of Experience)

Optimizing control of base station resources by analyzing packets and Users Quality of Experience (QoE) estimation



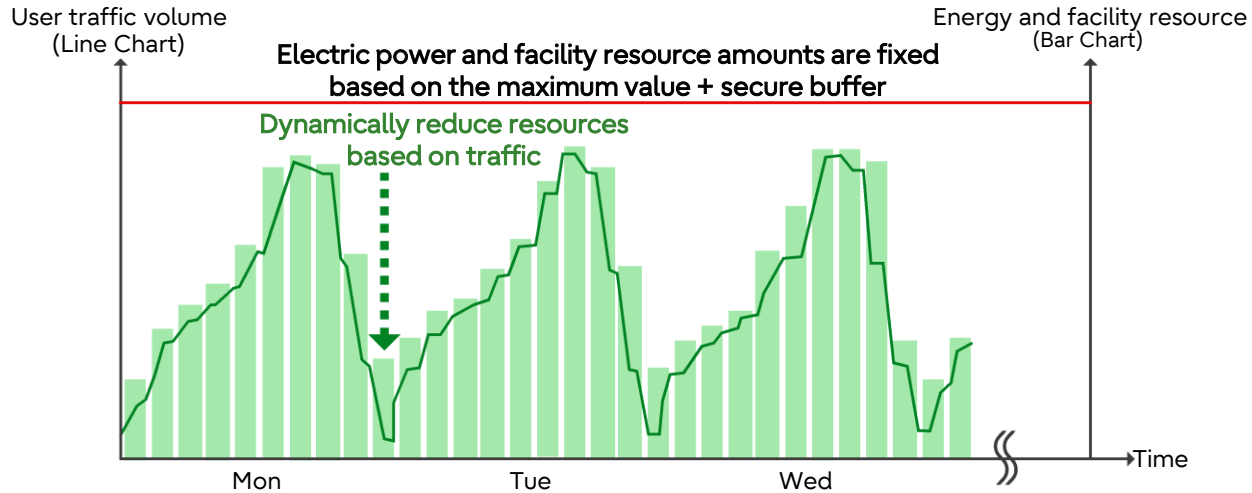
Estimate network traffic per each application for multiple pins of network slicing

This material includes information from a project commissioned by the New Energy and Industrial Technology Development Organization (NEDO).

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Based on prediction of user behavior and usage

5G system energy and facility resource reduction



Technologies

Non real-time control Auto Cell Re-Design Technology

- AI/ML predictions future traffic fluctuations
- Digital Annealer Technology Enables Fast Optimal Cell Design Based on Predictions



Real-time control Dynamic Resource Allocation Technology

- Scheduler technology and flexible fronthaul configuration allow flexible changes in the relationship between RUs and Virtualized CU/DU.
- Provides operational resource optimization

Fujitsu virtualized CU/DU Key differentiators

virtualized CU/DU that achieves both power saving and performance

1 High Performance/High Capacity

Performance

With DU Accelerator Card

Contribution to reduced installation space and power consumption

2 Flexible dynamic resource allocation according to the number of cells

Flexibility

Utilizing Flexible FH Structure

Allocate cell resources according to traffic and operating conditions

3 vRAN Autoscale

Easiness

By resource control per cell

4 Automatic cell re-design

Flexibility

Use up vRAN resources to the fullest



Power saving  Performance

CO₂ emission of total system to be
1/2 of today's amount by FY2025*

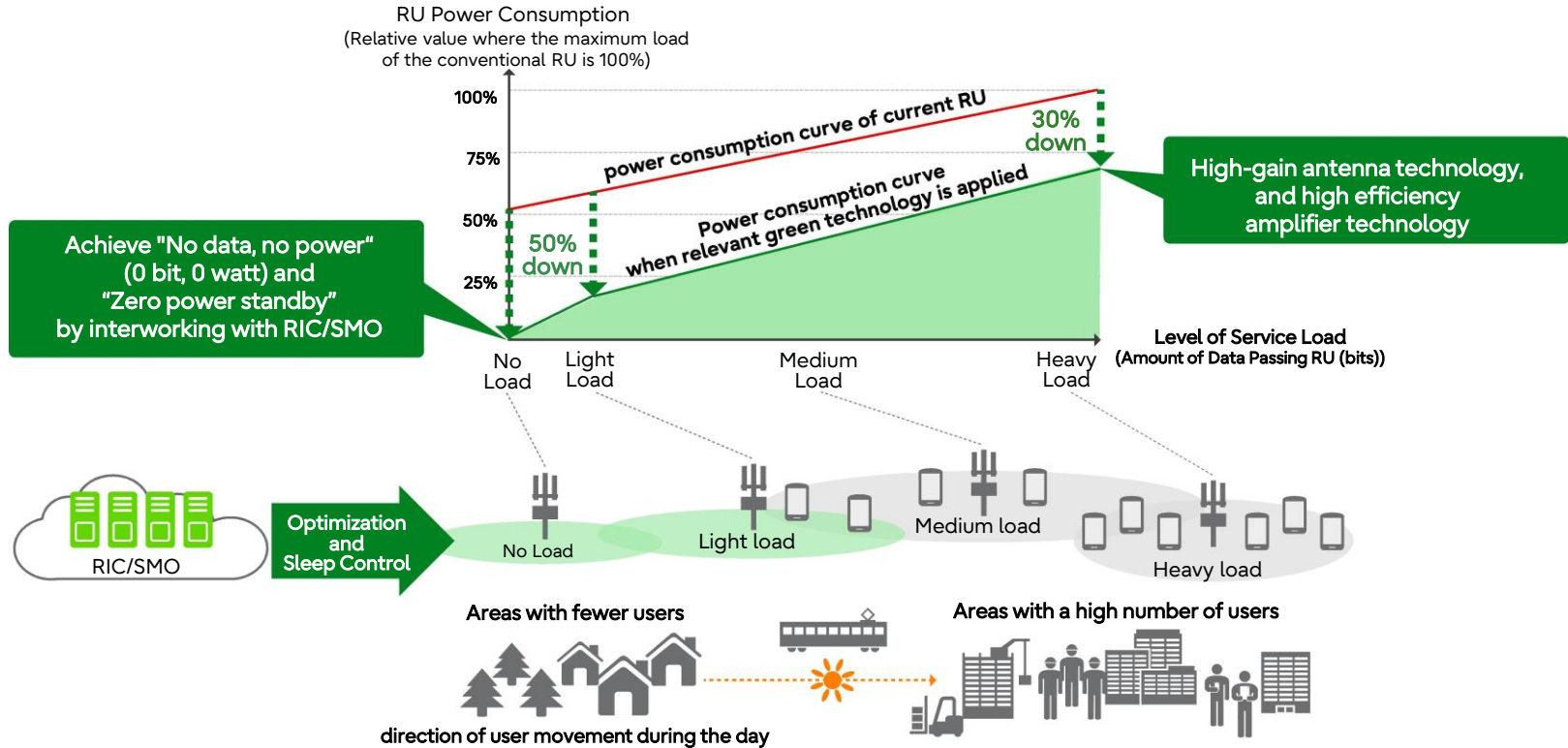


This material includes a part of outcomes from a project commissioned by the New Energy and Industrial Technology Development Organization (NEDO).

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Based on prediction of user behavior and usage

RU Power Consumption Reduction technologies with RIC/SMO

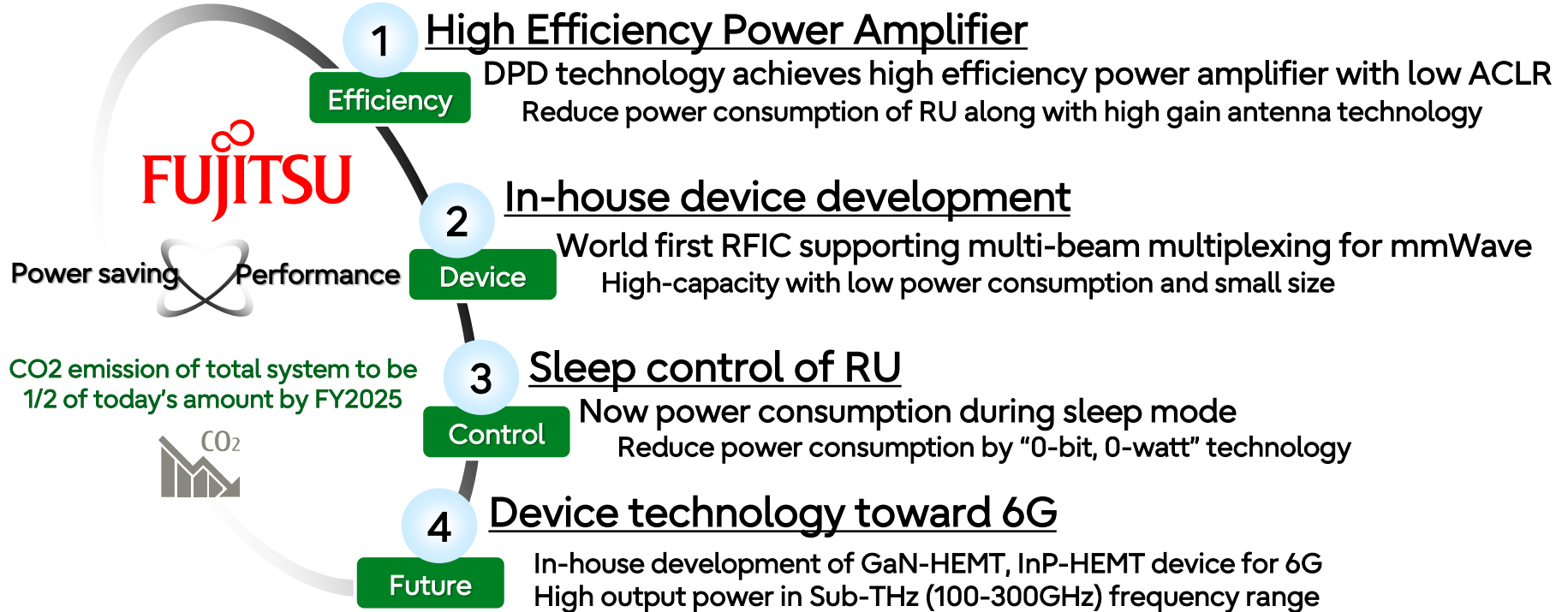


Fujitsu Radio Technology

Key differentiators

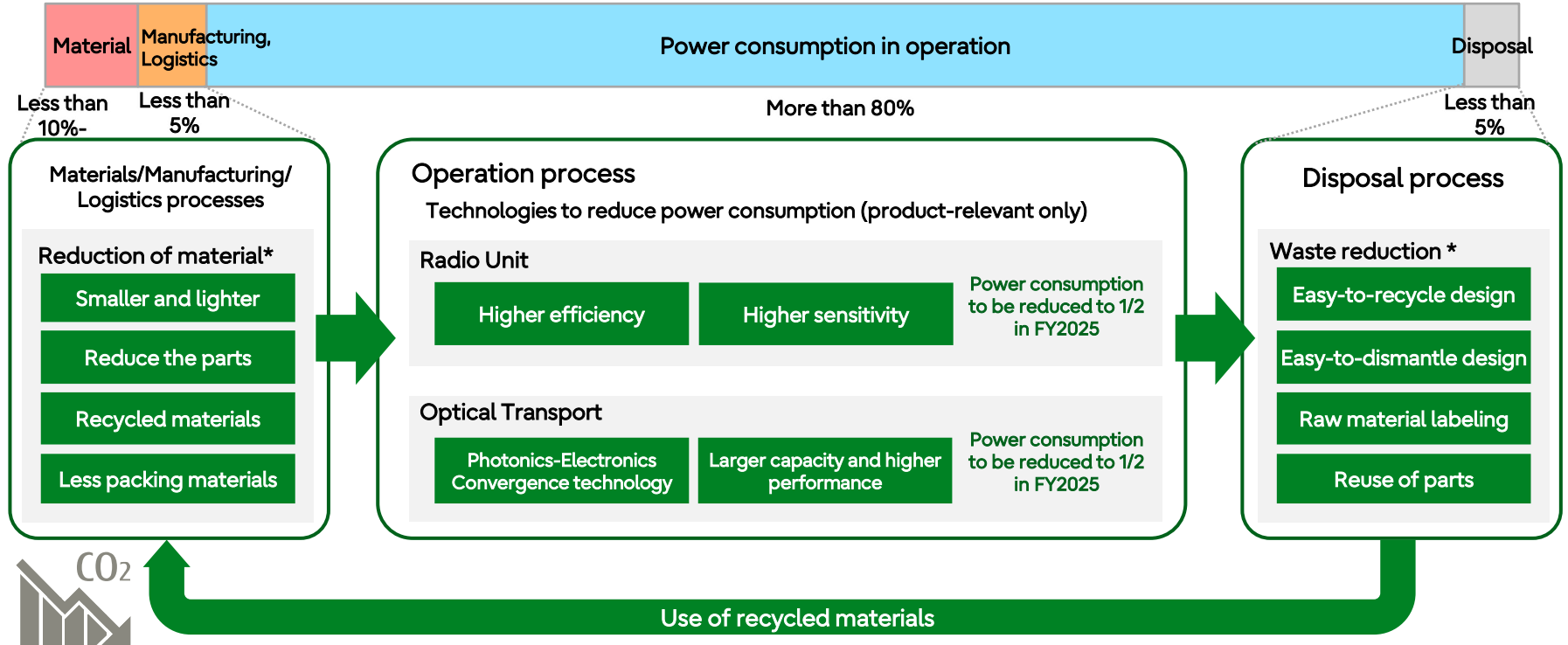


High efficiency power amplifier and in-house device technology that achieves power saving



Reduce environmental impact throughout the product life cycle

Percentage of CO2 emissions through the product life cycle *



*Fujitsu Product LCA Initiatives
<https://www.fujitsu.com/jp/about/environment/lca/index.html>

Thank you

