



faradai

ENERGY & SUSTAINABILITY INTELLIGENCE

A Data Driven Approach to Achieving Net Zero

faradai.ai





faradai

ENERGY & SUSTAINABILITY INTELLIGENCE

Capture & gain clarity from your data

Robust Carbon Calculation & detailed energy analytics

Faradai Sustain

Faradai Energy



NET ZERO





NET ZERO

We cannot reach Net Zero without data

Data is our vital tool

But it can also feel like a compliance burden

Faradai's global reach



15

Countries

12K

Facilities Monitored

5M

Real Time Data Streams

0.6

Gigaton CO2 Savings



Sustainability Driven Experts



Burak Sefer –
COO



Edward Hubbard –
Global Sales Director



Sustainability Driven Experts



BOSCH

SIEMENS



Burak Sefer –
COO



Edward Hubbard –
Global Sales Director



A data driven approach to achieving Net Zero

- Faradai & Oracle
- Accurate CO₂ measurement
- Robust CO₂ reporting
- Detailed Energy Management
- AI analysis
- Reduction CO₂ and energy

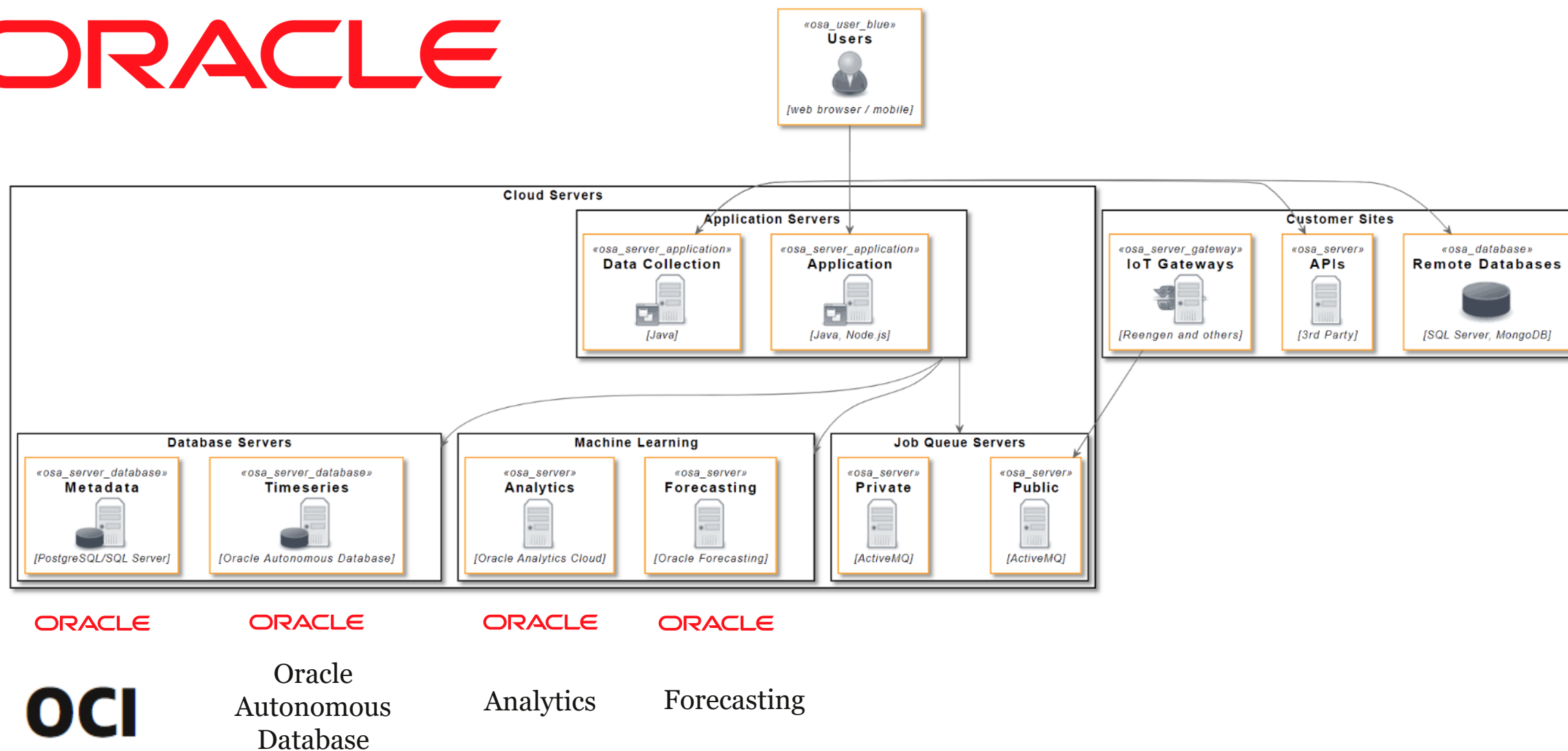
A strong partnership



Breaking technological ground to reduce emission

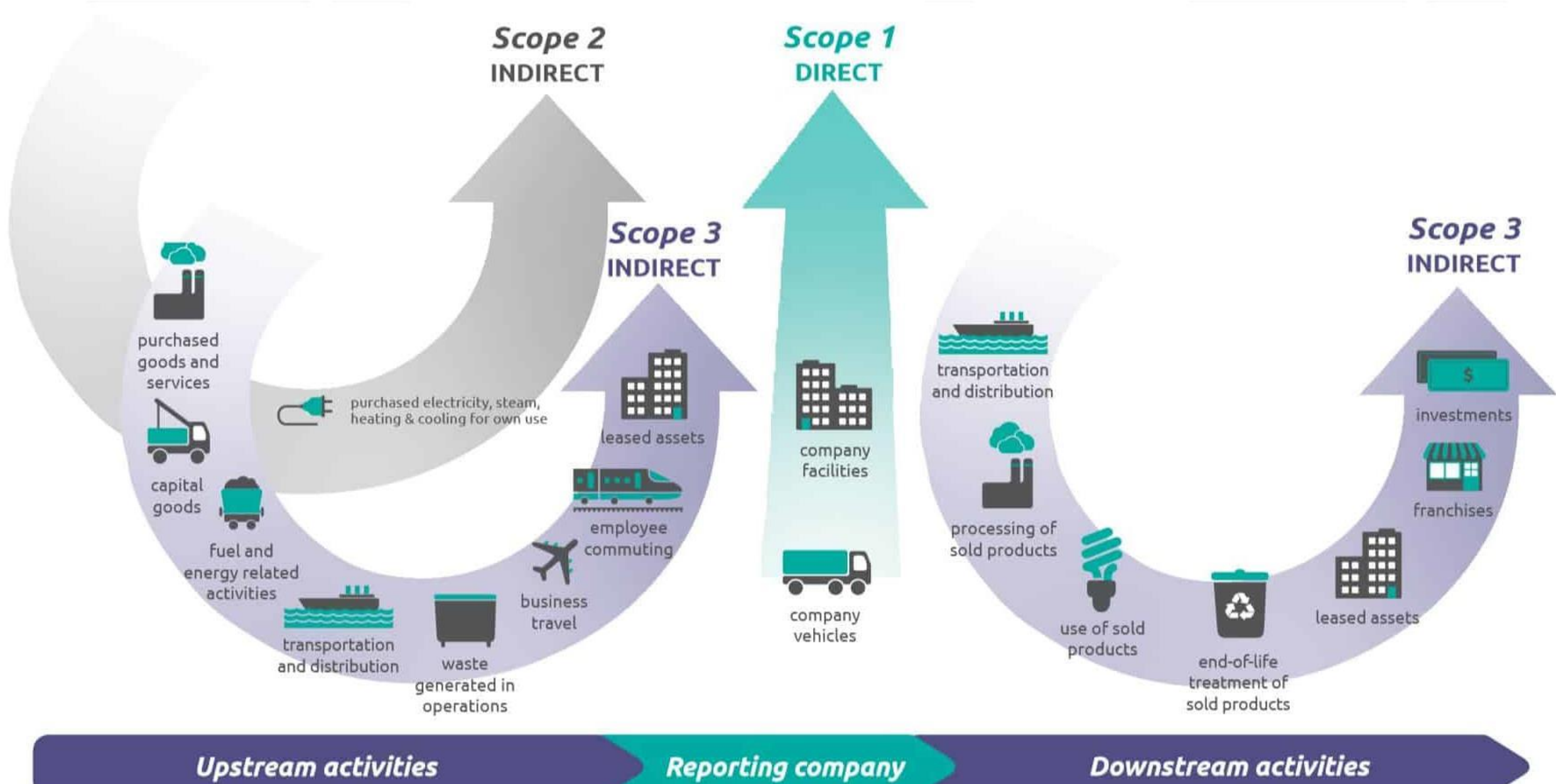
An Oracle integrated application

ORACLE

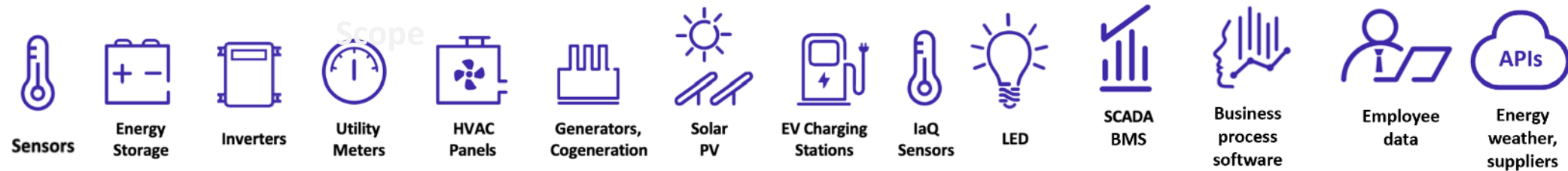


Measurement

Measurement



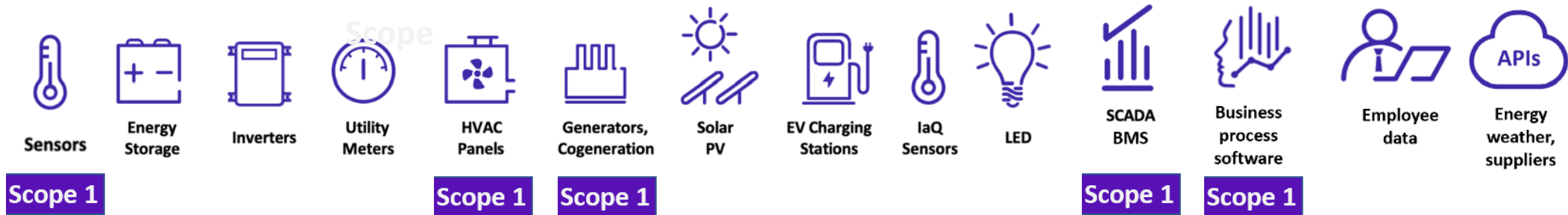
any device, any system, any where...



plug-in adapters for data capture

Data Capture

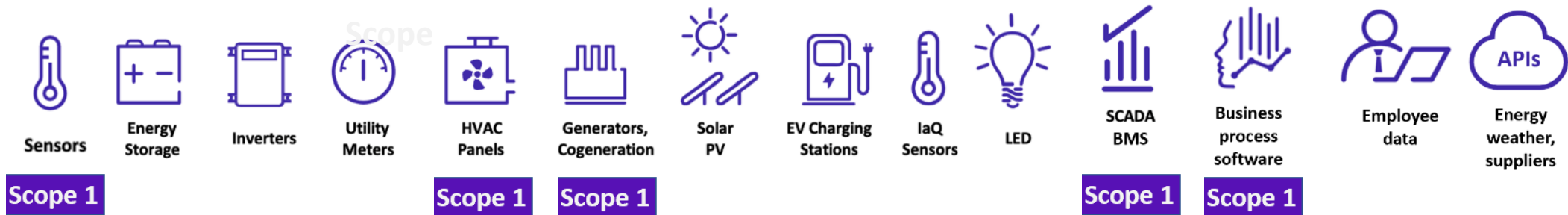
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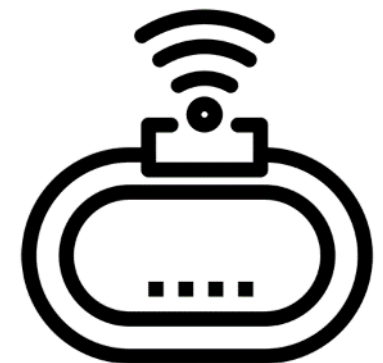
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Data Capture

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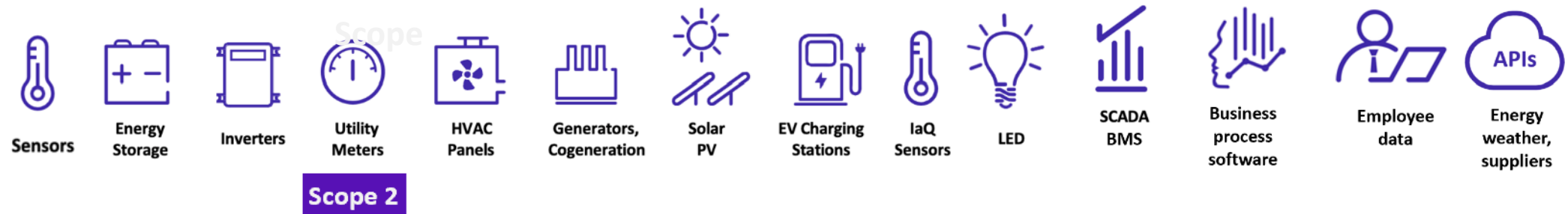


plug-in adapters for data capture



Data Capture

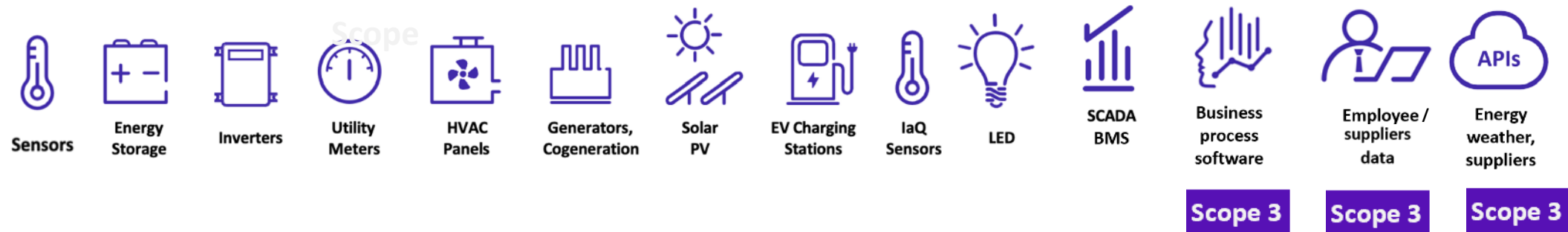
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Data Capture

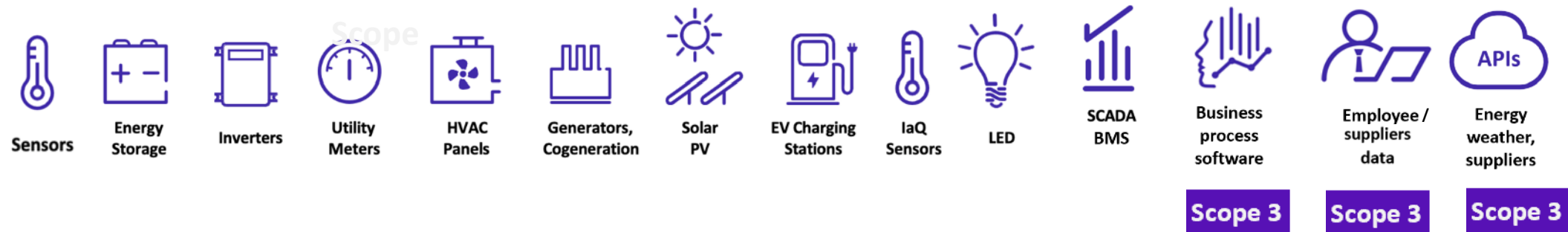
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Data Capture

any device, any system, any where...



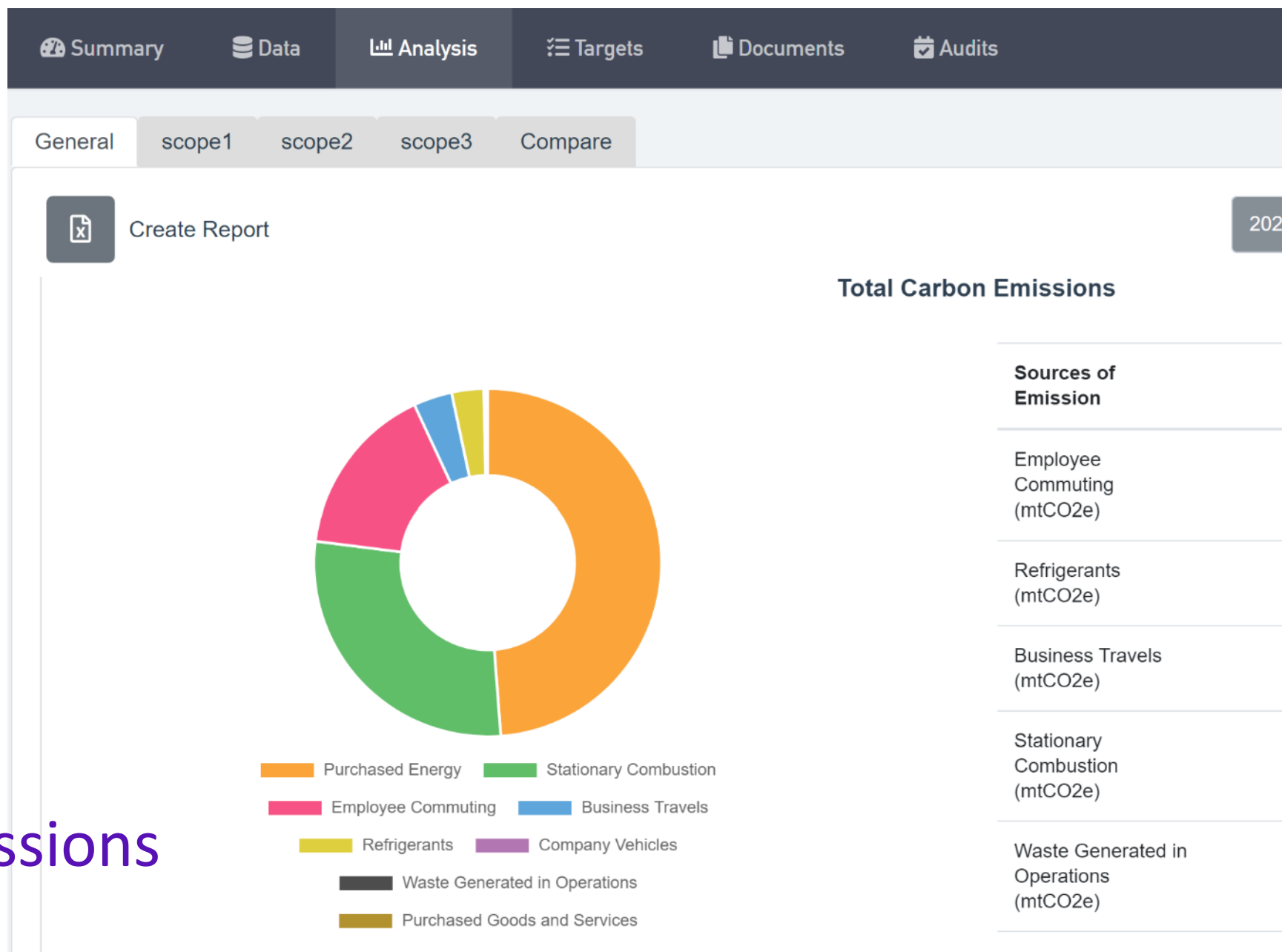
plug-in adapters for data capture

Calculation

Efficient & accurate
conversion of source
data to CO_{2e}



Analysis



- Normalisation

- Building size
- No. of staff
- Turnover

- Benchmarking

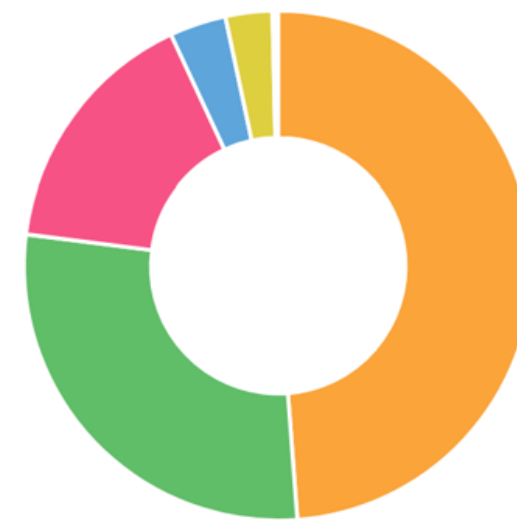
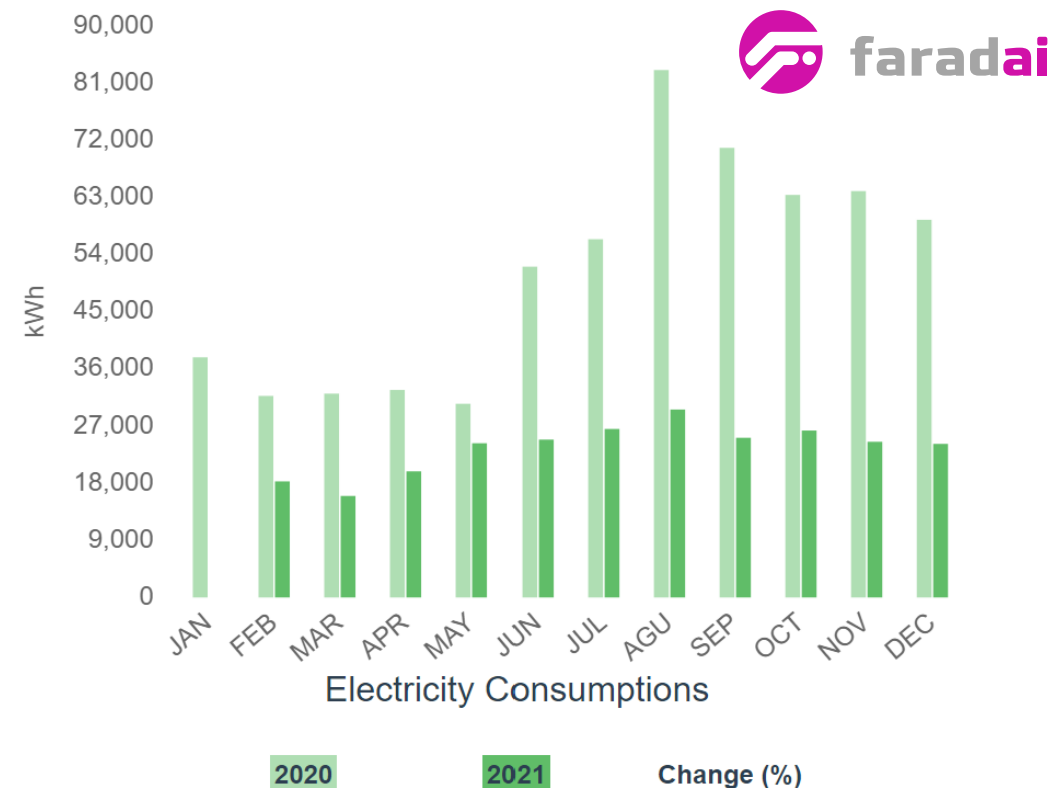
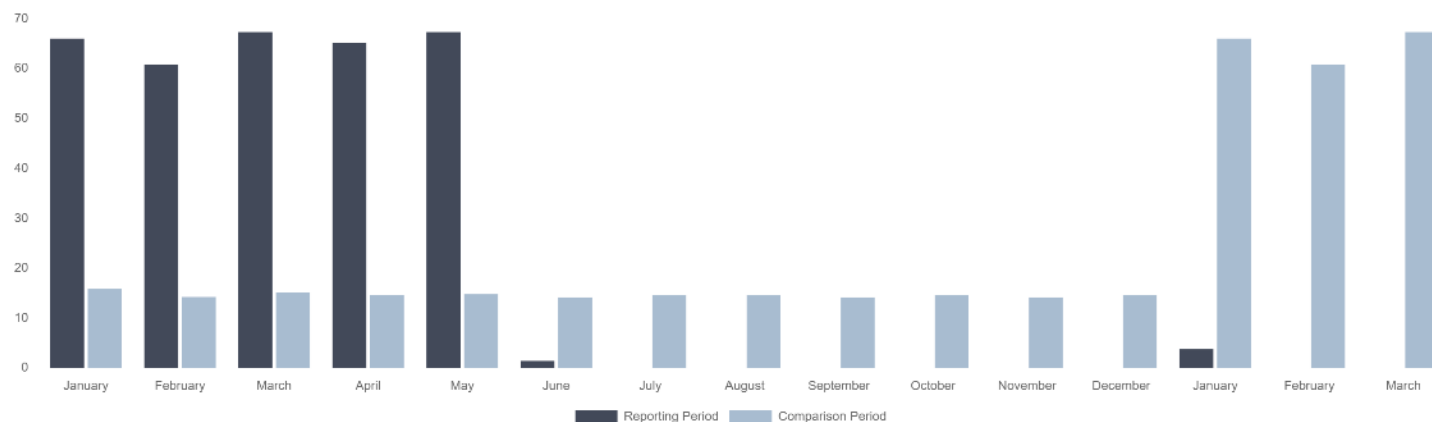
- Comparison

- See excessive emissions

Reporting

- Reporting for:
 - Investors
 - Internal reporting
 - External disclosures

Data Type: Gasoline (Generator) (liter) | Reporting Period: Jan 2021 - Mar 2022 | Comparison Period: 1 Year prior (Jan 2020 - M) | Normalization: - | Location Type: All | Region: All Region | Site: All | Filter: [Y]



Easing the burden of compliance



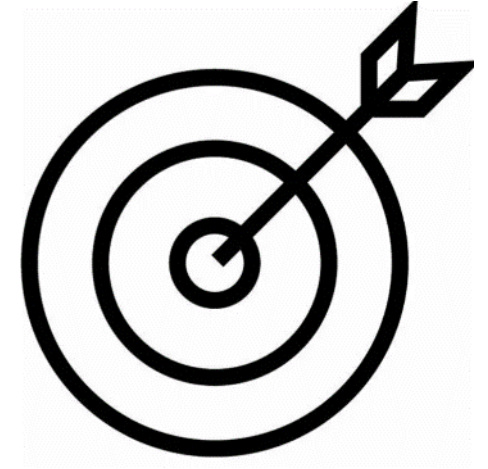
Comply with a range of standards



Growing number of compliance specific modules



Target setting



Target setting and management by source, site or region

Science Based Targets functionality

Set a baseline

Set absolute reduction target

Set timeline to reduce

Limit the greatest impact of temperature rise

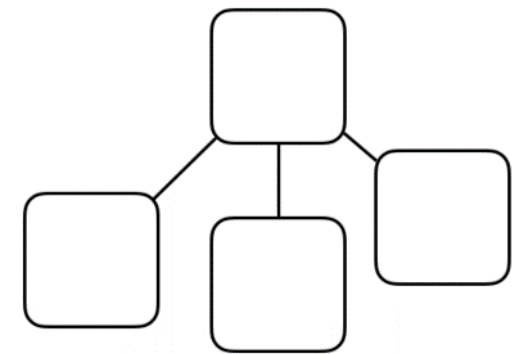
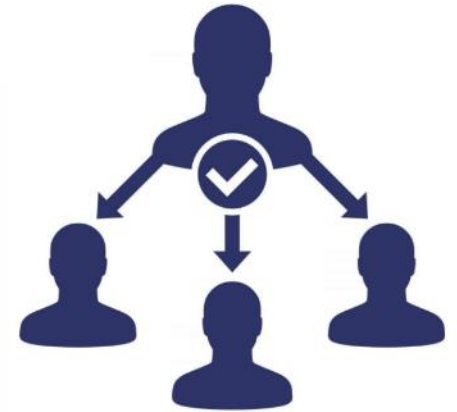


Task Management

Setting a target can seem like the easy bit

Following through is harder

Task Management gives **efficiency**,
transparency and **traceability**



Off-setting



Measurement

Carbon Intelligence Demo Video



DATA



GOALS

| Approved | Total |
|----------|-------|
| 1 | 47 |



DOCUMENTS

| Total |
|-------|
| 14 |



AUDITS

| Opened | Total |
|--------|-------|
| 0 | 0 |

The Problem

- **BBVA are part of the Net Zero Banking Alliance and must report emissions**
- **900 Branches across the country**
- **Data siloed in different bits of equipment**
- **Collecting data using spreadsheets and emails**
- **Many staff hours wasted and accuracy errors**
- **Staff engagement low as painful process**

**Very
Inefficient
Process**

The Solution

Scope 1 (direct emissions created by company)

- **Custom integrations**
 - Diesel generator smart meters
 - ERP fleet fuel

Scope 2 (purchased energy)

- **Fiscal meter integration & gateway installation**

Scope 3 (supply chain)

- **Core supplier API integration**
- **Web forms for staff commuting and smaller suppliers**

**Improved
Data
Capture**

The Solution

Source data automatically converted to CO_{2e}

Data normalised

Automated comparisons and benchmarks

Highlighted areas for improvement

**Automated
calculation
& analysis**

The Result

Accurate conversion to CO_{2e}

Clearly tracked targets & traceable workflows

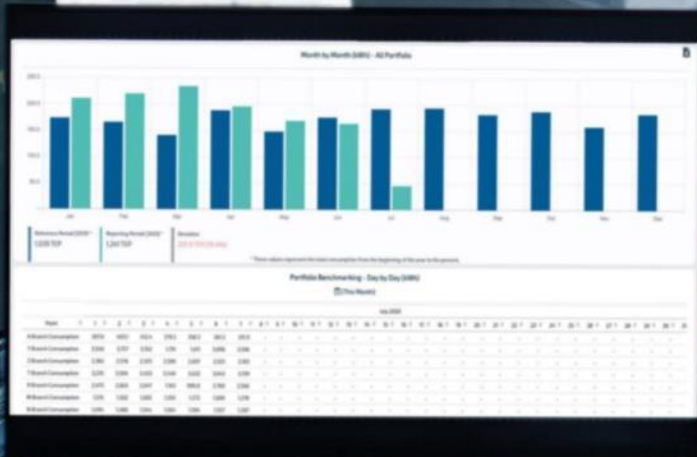
Benchmarks and gamification

Engaged staff and huge labour savings (10x)

Improved accuracy

**A Very
Efficient
Process**

Reduction



Detailed Energy Analysis & Management



We Support

C-level Execs

Sustainability Teams

Facilities operators

Data collection &
validation is **labour**
intensive

Reporting is **time**
consuming & prone
to **inaccuracies**

Fragmented data
creates **data loss**
risk

Overwhelming
volume makes
identifying trends &
actions difficult





Executive
Overview
⚙️

Energy
Performance
Indicators

Consumption
Benchmarks

Asset
Management

Power Supply
Conditions

Energy Use
Details

Utilities Cost
Accounting

Alerts

new



Energy & Sustainability Intelligence Platform

The platform digitalizes and optimizes your energy management as well as reduces CO2 emissions in the banking industry while a significant amount of savings in energy operations!

This IoT and AI-based software solution can help you to **decrease your energy costs by up to 15%, gains up to 60% operational efficiency & reduces CO2 emissions by Mega Tons** for the holistic-view management of your multi-branch portfolio.

Energy Consumption Details

📅 (This Year)



Electricity
11.2%



Natural Gas
88.8%

Total Energy Consumption
9,931,260 kWh
▼ -2.0% vs 2021

Cost savings compared to

📅 (This Year)

by Three Rate Commercial Tariff
-23,695 £

Impact of Solar PV

From Installation



Savings
350,100 £

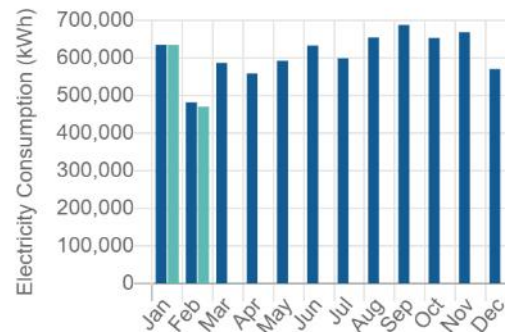


Saved Trees
385.9 Trees

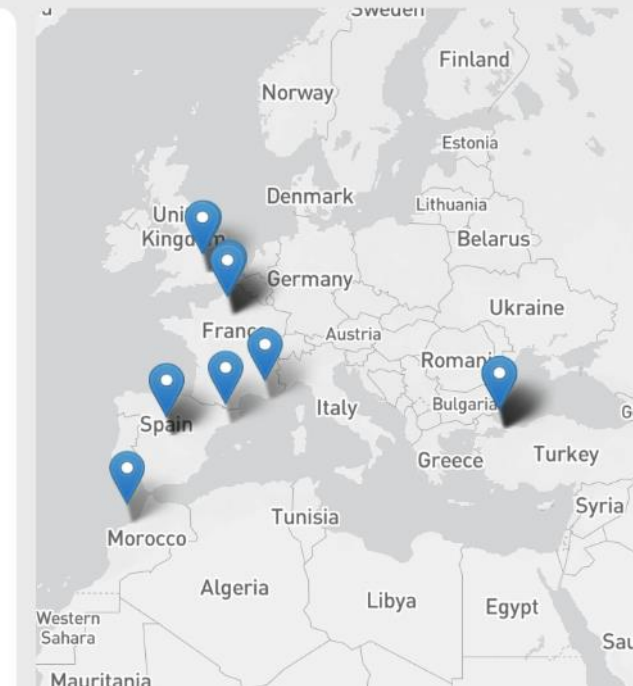


Reduced Carbon Emission
374.5 tCO₂

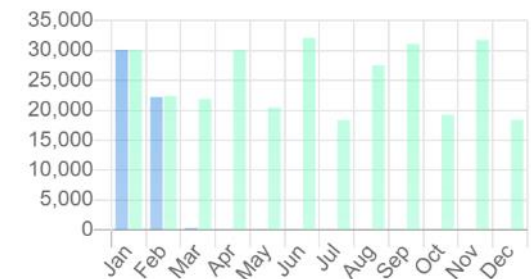
Electricity consumption trend



Reference Period (2021) *
1,159,379 kWh
Reporting Period (2022) *
1,109,011 kWh
Deviation



Solar PV generation trend



2022 *
52,681 kWh
119,047 £
Deviation
-1,570 kWh (-2.9%)
72,723 £

2021 *
54,251 kWh
46,324 £

Analysis

Energy Consumption Performance



Non-operating Performance



Energy Consumption Characteristics

High Reliability



Your **Operational Behavior** and **Weather Sensitivity** performances are below clusters averages.

SAVING TIPS

1 Because of **that reason**, you should **reduce something**.
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Pretium lacus quam id Leo. Voluptat maecenas volutpat blandit aliquam etiam erat velit scelerisque.

Weather Sensitivity Performance

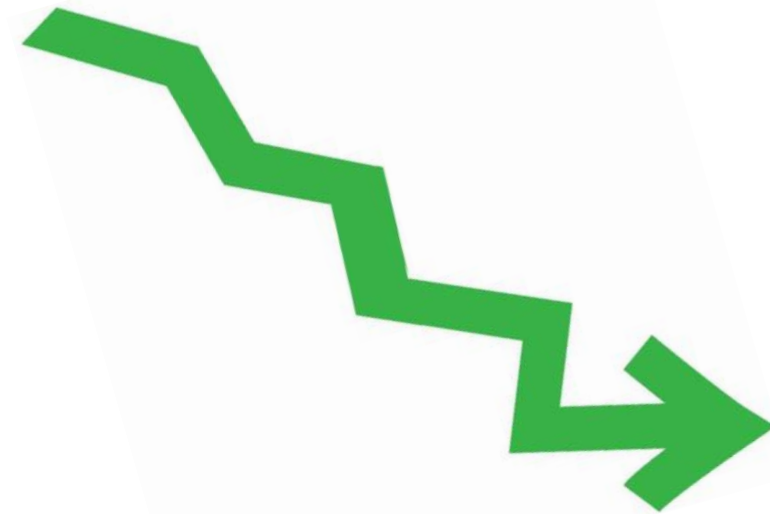


Consumption Performance

normalisation, benchmarking & AI powered algorithms

Zone analytics, Energy Breakdown Analysis & Efficiency identification

Conducting detailed analysis &
utilising AI machine learning to identify saving



Energy Usage

Peer Benchmarking



Branch Segmentation



Anomaly Detection



Load Optimization



Non-Operating
Hours' Consumption
Optimization



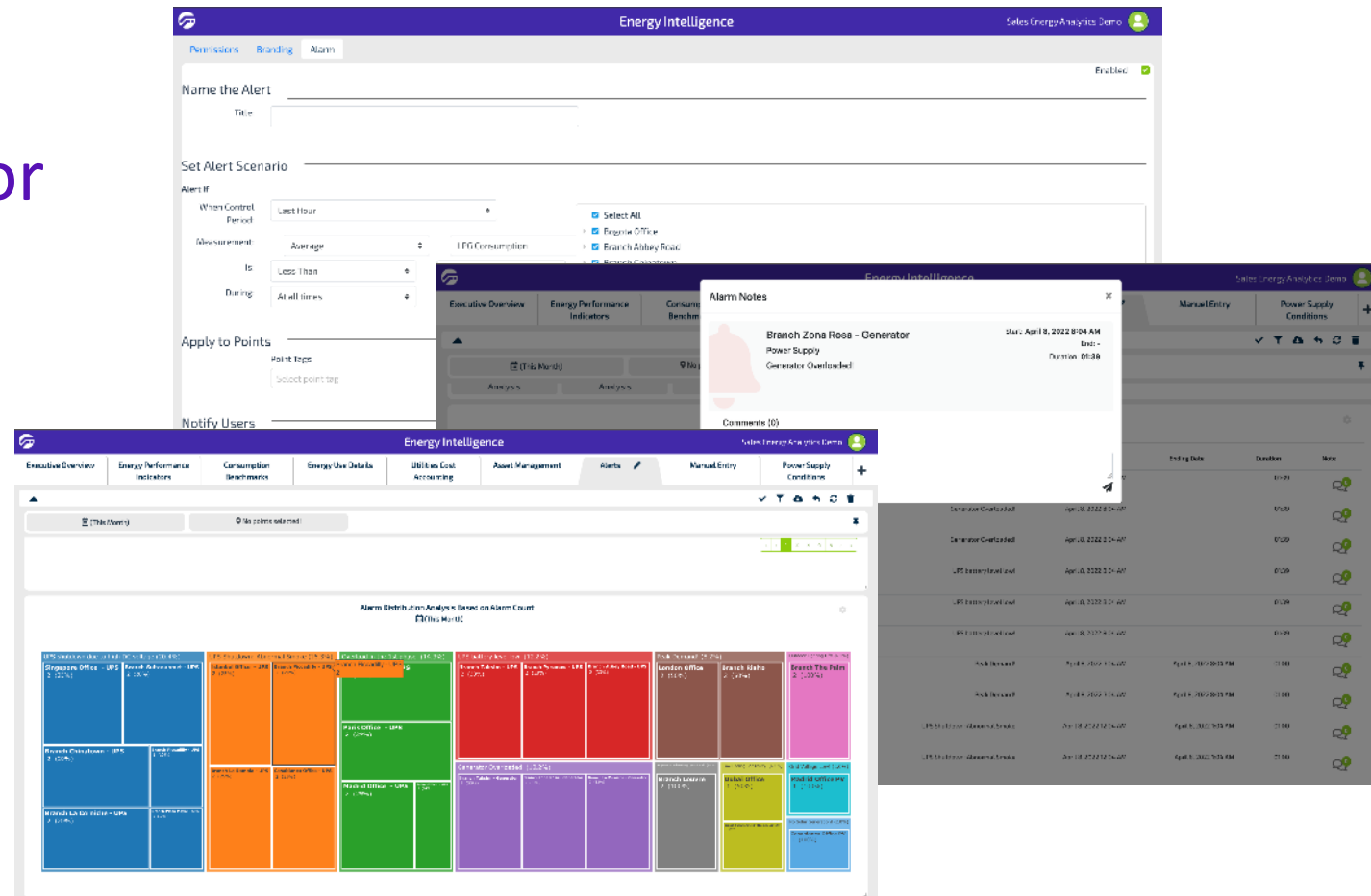
Load Forecasting



Energy Saving
Recommendations

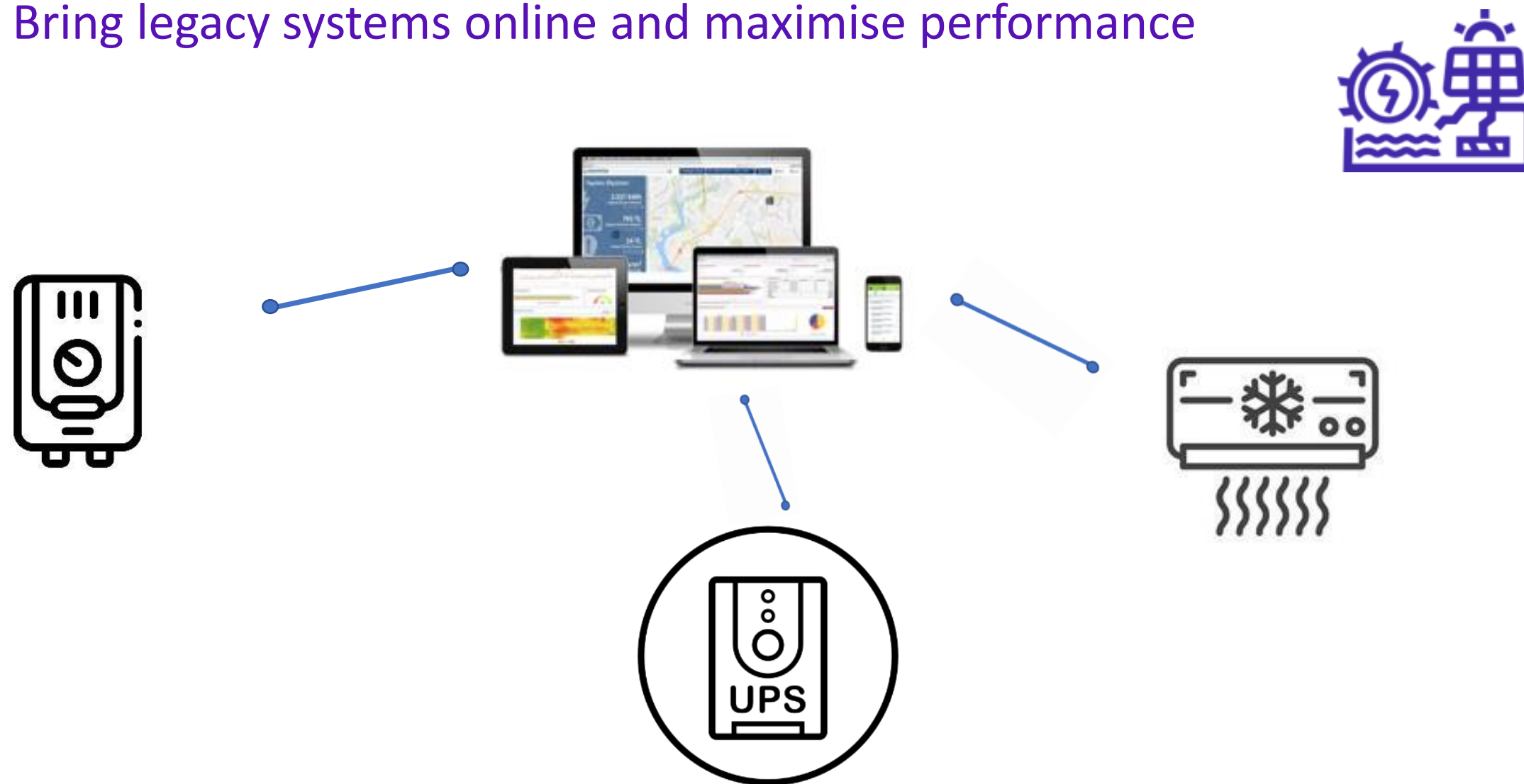


Create, alerts, notification or even automate action



Critical equipment & Asset monitoring

Bring legacy systems online and maximise performance

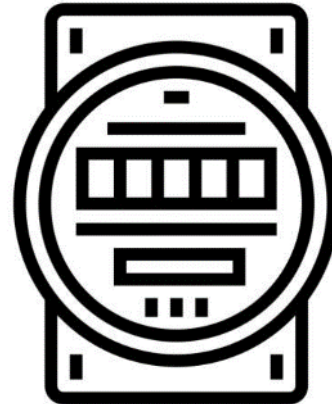


Bill Validation

Identify bill mistakes to ensure you only paying for the energy that you use



VS

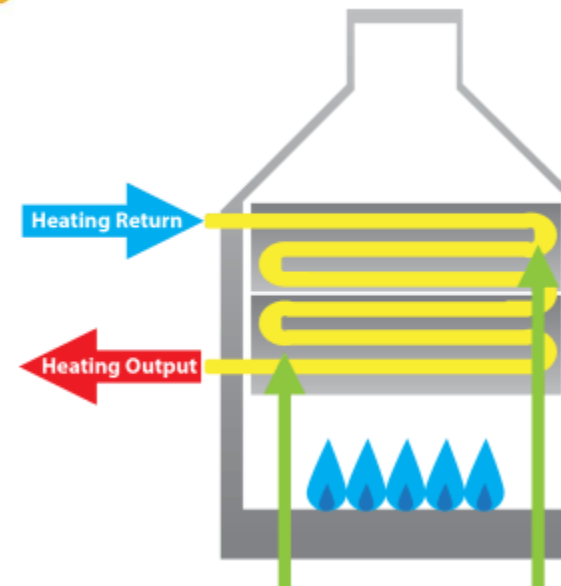


Guard against rising



Energy efficiency project evaluation

Confidently understand the impact of energy efficiency upgrades



Reduction

Energy Intelligence Demo Video

| Energy Intelligence | | | | |
|-------------------------------------|---------------------------|--------------------------|---------------------------------|---------------------|
| Energy Performance Indicators | Consumption Benchmarks | Energy Use Details | Utilities Cost Accounting | Asset Management |

The Problem

Case Story: Energy Management & Optimisation

- A range of equipment/platforms on site – lack of interoperability
- Manual monitoring of energy performance metrics & reporting – Lots of excel sheet
- Manual data collection, labour intensive & inaccuracies
- Time consuming & unclear cost breakdown analysis

**Lack of
interoperability**

The Solution

Case Story: Energy Management & Optimisation

- Integration with existing hardware, Scada, Automation & ERP systems
- Customizable One-Click technical & executive reporting
- Unit Energy Cost Analysis per product / shift / assembly line
- Rule engine refined for certain situations
 - Maximum consumption limits soon to be reached
- ISO 50001 Compliance & KPI Analytics

**Efficient
collection &
analysis**

The Result

Case Story: Energy Management & Optimisation

- A single unified platform customisable by users
- 4% reduction in energy usage
- 10% energy expense savings
- 10 X improvement in efficiency

**Energy &
cost savings**

Support

dedicated customer success & sector experts



Use Cases

MEDICALPARK



 **corendon**
HOTELS & RESORTS



ZARA



ÖZYEGİN
UNIVERSITY



Visibility, efficiency and carbon reductions across any portfolio of sites



BNP PARIBAS



Bank Audi

BBVA



MediaMarkt

FLO



PEPSICO

MARKS &
SPENCER
LONDON

MEDICALPARK



BOYNER



KOTON

mavi

BANANA REPUBLIC
EST. 1978 | SAN FRANCISCO

Commercials

| | Platform | Integrations | Service/Support |
|--|---|--|--|
| Faradai Sustain (carbon accounting) | Software provision free | Install & integration set up cost | Priority support chargeable monthly based on requirements |
| Faradai Energy (analytics + action) | Chargeable based on of data points (SaaS) *licence options available | Monthly integration maintenance charge | Dedicated customer success free of charge Managed services chargeable |

Project Timeline



Criteria Assessment



Project Design
&
ROI Analysis



Project Quotation with Different
Financial Models



Installation &
Commissioning



Software Training
Managed Services

2-3 weeks

6-12 weeks

Faradai Sustain

Faradai Energy



**'WIDEST'
INTEROPERABILITY**

to Any 3rd Party Device, Equipment,
Platform



**DEDICATED CUSTOMER
SUCCESS TEAM**

& sector experts



**ADVANCED
ANALYTICS**

Artificial Intelligence, Predictive
Intelligence



**'HIGHEST'
CYBERSECURITY**

For all Hardware &
Data on Platform



We will support you to



Lower Carbon Emissions



Reduce Energy Usage



Increase Operational Efficiency

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