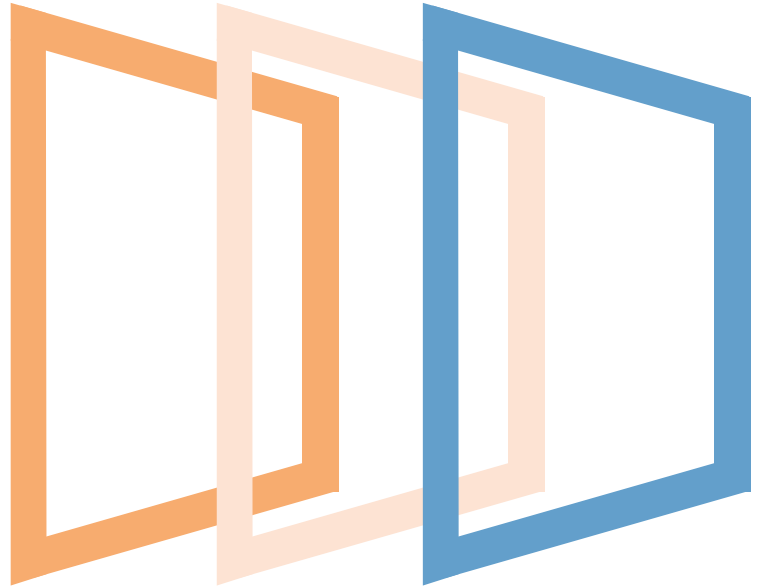


Smart Energy Solutions

Onesait Efficiency & Consulting

October 2018

minsoit



An Indra company

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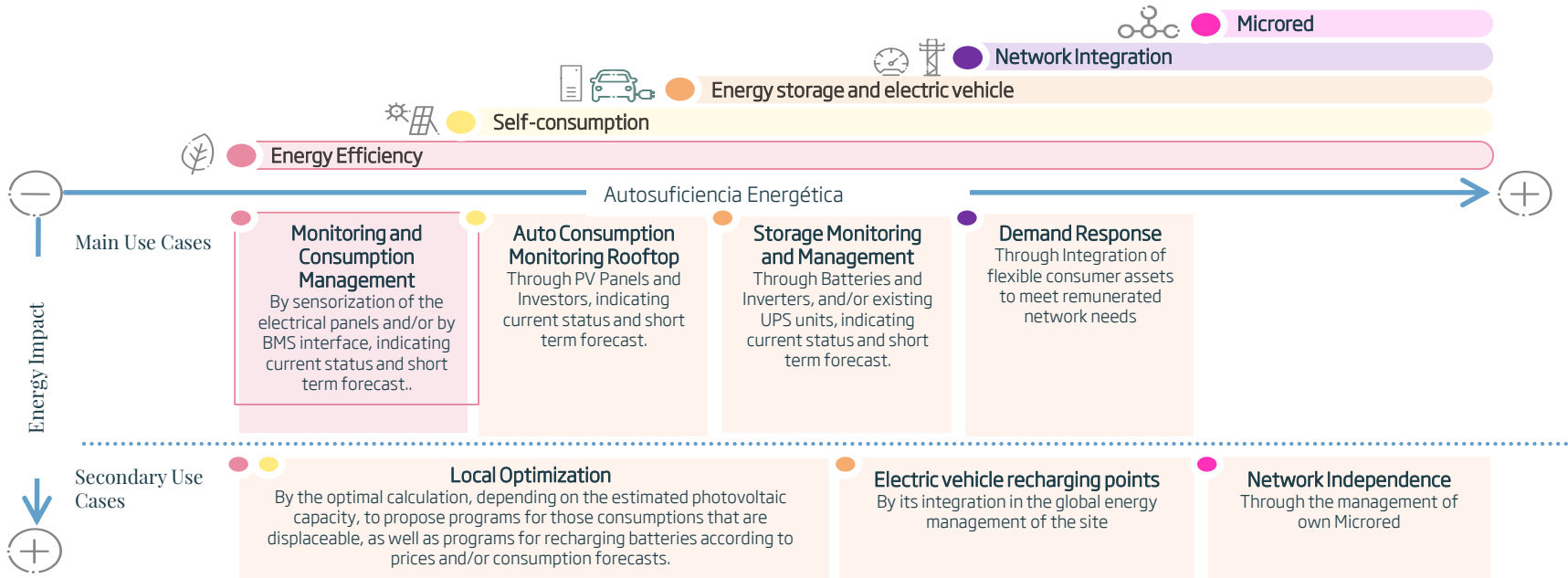
- Renewable Energy
- Energy Management System ISO5001
- Eco-efficiency Strategic Plan (EEP)
- Sustainable certifications
- Carbon Footprint
- Water Footprint

Smart Energy

01

01. Smart Energy: Vision

Onesait Efficiency's platform will facilitate progressive a andvance towards energy self-sufficiency, through the adoption of autogeneration and storage, even managing its own electric Microred.



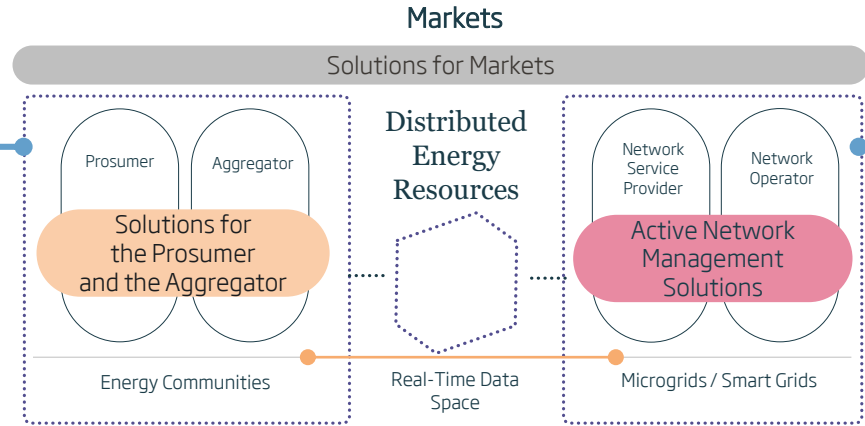
01. Smart Energy: Vision

In the new energy model, consumption points multiply their value if they are integrated into the network adopting a multidisciplinary role.

- Consumers are also producers: **Prosumers**

- New roles appear that group other points of consumption: **Aggregators**

- Both Prosumers and Aggregators need new Solutions



- Consumption points and the network are integrated through a **common and dynamic vision of energy assets**: Distributed Energy Resources (DER).

- A **sensorization of the MV/LV network** to which the consumption points are connected is produced in order to integrate them in the new model.

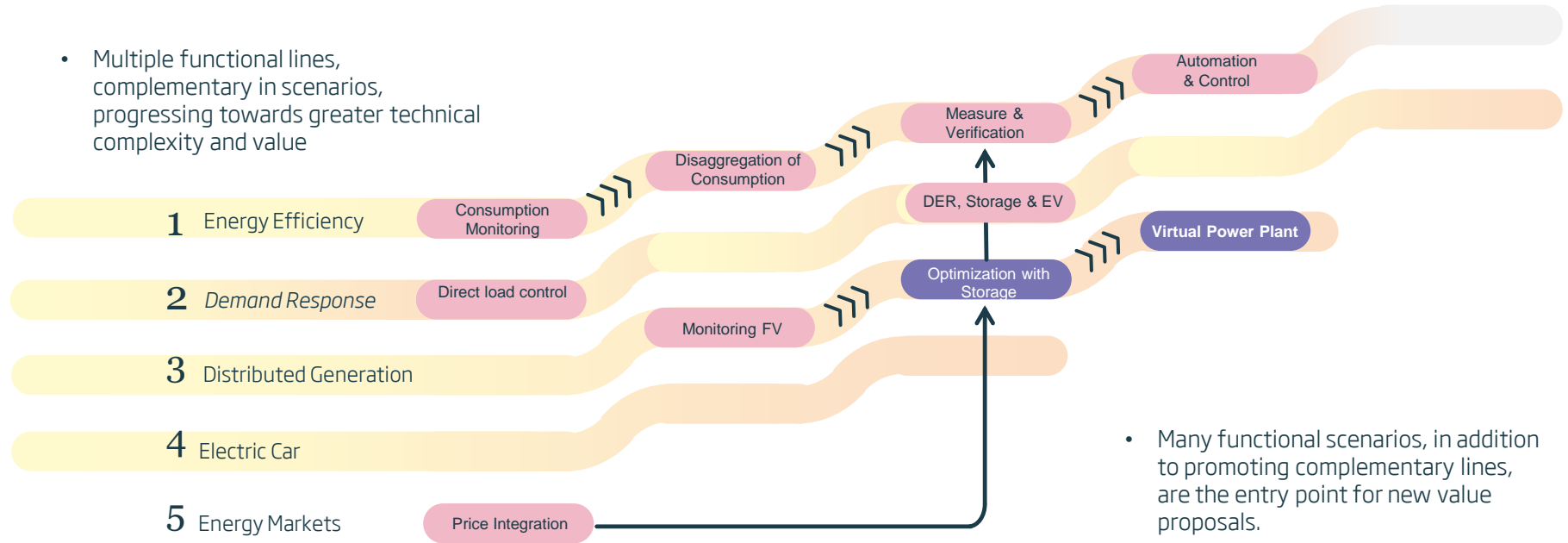
- **New roles** appear capable of **providing services** to the MT/MT network making use of an active management of consumption points.

■ **Energy assets** are modeled as Distributed Energy Resources and are able to participate in new **global efficiency business models**.

01. Smart Energy: Vision

Each actor must design its transition to the new model in an orderly manner, ensuring profitability in each step.

- Multiple functional lines, complementary in scenarios, progressing towards greater technical complexity and value



- Many functional scenarios, in addition to promoting complementary lines, are the entry point for new value proposals.

Scalability and progressivity are the keys that allow each stakeholder to adjust its **value proposal** to the role they want to play in the **new model**.

Energy Efficiency

02

02. Energy Efficiency: Onesait Efficiency

The solution consists of three main pillars with which it is possible to monitor and manage energy consumption efficiently to reduce costs and increase the reliability of supplies



Hardware

- **Dataloggers** Ethernet/3G⁽¹⁾
- **Three-phase meters** (low and medium voltage network)
- **Water meters** with pulse emitter
- **Gas meters** with pulse emitter
- Equipment needed for communication and connection between devices and the platform
- **Installation and Configuration**⁽²⁾



Software

- **IoT Platform** with Big Data and Analytics Capabilities (Including Infrastructure)
- **Access to all the functionalities** of the Energy Management platform
- **Update and maintenance** of the platform (Support Levels 1, 2 and 3)
- **Training users** in the use of the Platform



Energy Management

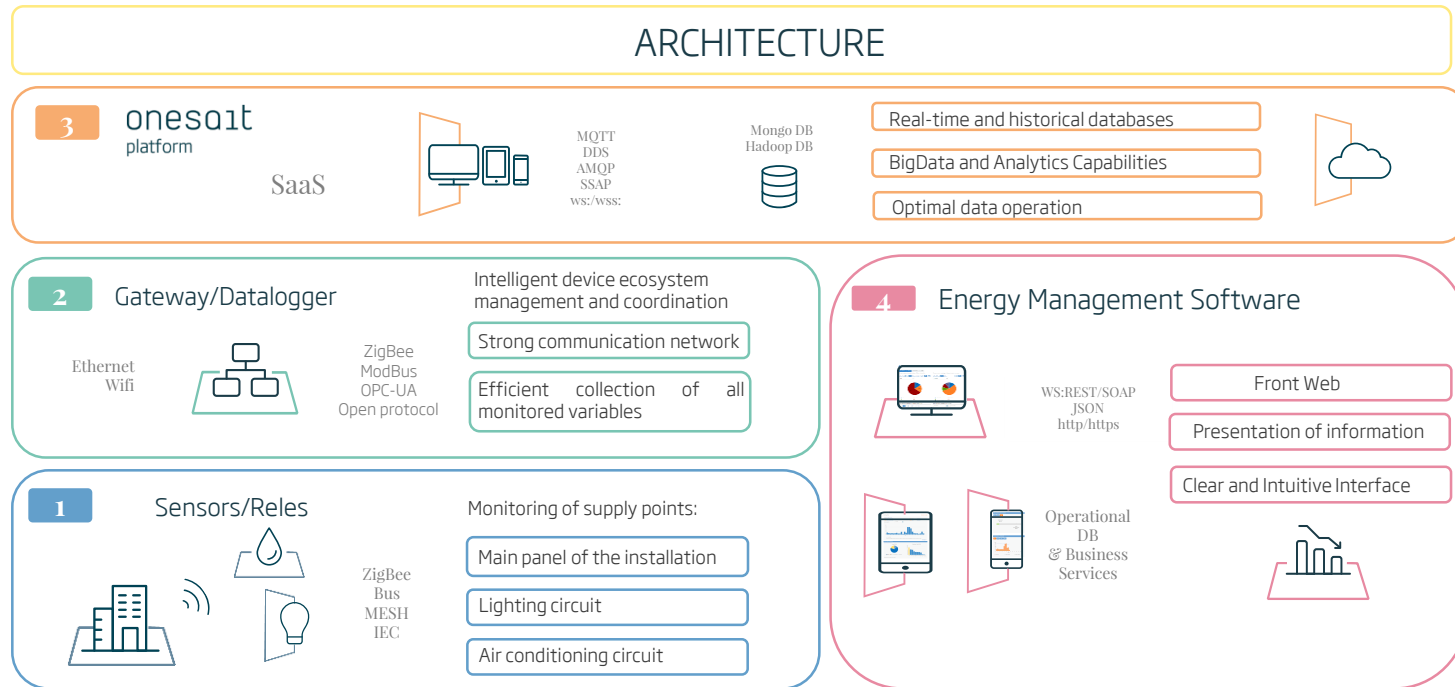
- Our energy consultants will identify savings opportunities and gaps in the monitored installation.
 - **Results** of detected **inefficiencies** and **gosh** consumption will be obtained.
 - **Recommendations** and monitoring of savings measures (**MAEs**)
 - **Benchmark** between companies and with the average of the sector

Beneficios:

- **Energy saving 15-20%**, increase of the useful life of the equipment ...
- **Dynamic and intelligent control** of each point of supply and consumption in real time
- **Centralization** of energy consumption (electricity, water, gas)
- **Integration with existing BMS** and other facility management systems (Maintenance, ERP, CCTV, PLCs, etc.) with aggregated view of all facilities.
- **Identification of inefficiencies and savings measures**

02. Energy Efficiency: Onesait Efficiency

End to End Service that covers the design of the solution, the supply and installation of devices, the commissioning of the platform and its operation and maintenance.



Consulting

03

03. Consulting: Energy Management System ISO 50001

We propose a Proof of Value that demonstrates the potential savings as a preliminary step to the final commercial implementation of the Energy Efficiency solution:

Targets

The proposal to implement ISO 50001 describes the following aspects:

- Establish actions aimed at carrying out energy audits.
- Documentary development, implementation and support in the certification of an Energy Management System in accordance with the ISO 50001 standard.
- The intervention plan describing the general phases, relevant aspects, the intervention of the technical team and considerations of different nature.
- Planning of execution and structure of the team that will carry out the project.

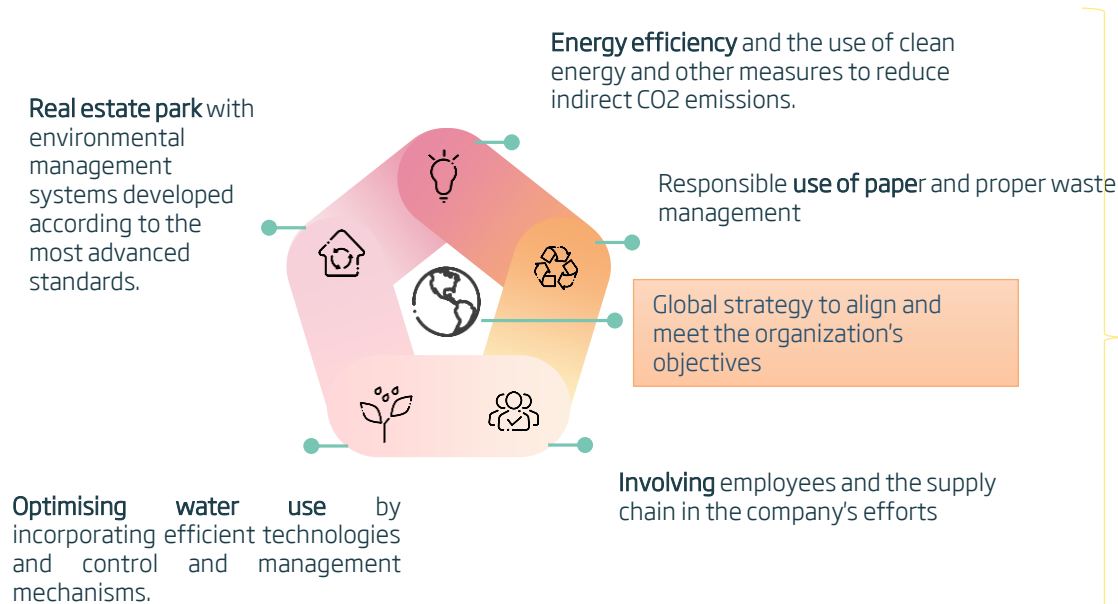
Expected Results

- Savings in energy consumption
- Improved control of operations
- Reduced maintenance costs resulting from better operation of equipment and machinery
- Reduced worker downtime
- Support for the implementation of awareness campaigns for guests and users
- Reputational increase of the company



03. Consulting: Eco-efficiency Strategic Plan

Eco-efficiency Strategic Plan (ESP), which includes a set of measures identified as feasible in an initial diagnosis, including technological and organizational innovations to provide a better service to its customers.



Expected results:

- Reduction of environmental risks
- Minimization of production costs
- Reduction of pollutant gases
- Reduction of energy consumption
- Savings in water consumption
- Decrease in spending on paper
- Support for the implementation of awareness campaigns for guests and users
- Digitization of documentation and reduction of paper use

Savings
BBVA Success Case

21% CO2
44% Paper
30% Water
16% Energy

03. Consulting: Sustainability Certifications

Sustainability certifications strengthen companies environmentally, economically, socially and reputationally



Environmental Dimension

- Efficiency optimization
- Energy saving (25 - 50%)*
- Reduction of water use (<40%) *
- Savings in emissions

Economic Dimension

- Increase in occupancy (1-6%)*.
- Operation and maintenance savings (8 -14%)*.
- Increase in value as an asset (7-10%) *

Social Dimension

- Increased tenant satisfaction
- Productivity increase (2 16%)*
- Public recognition of the commitment to sustainability

BREEAM® ES
el certificado de la construcción sostenible



Consumption Reduction

Orderly Waste Management

Proper Facilities Management

Risk reduction for legal non-compliance

To position the company in the field of environmental management

Motivation of staff



03. Consulting: Carbon Footprint and Water Footprint

The identification of the Carbon Footprint and Water Management will provide a reduction in costs and an improvement in the environmental quality and social commitment of the company.



Report Credibility

Regulatory Compliance and Reputational Growth

- Regulation (continuously evolving)
- Public pressure
- Transparency towards stakeholders
- Reputation management

Cost Reduction

Resource Productivity

- Energy Efficiency
- Consumption and cost reduction strategies

Growth

Alignment with the Business Model

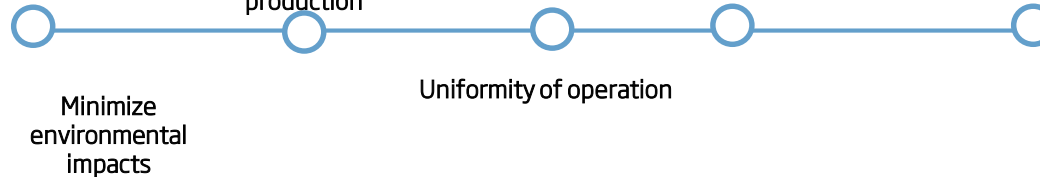
- Mission and values
- Opportunities
- Risk Management



Cost savings without compromising production

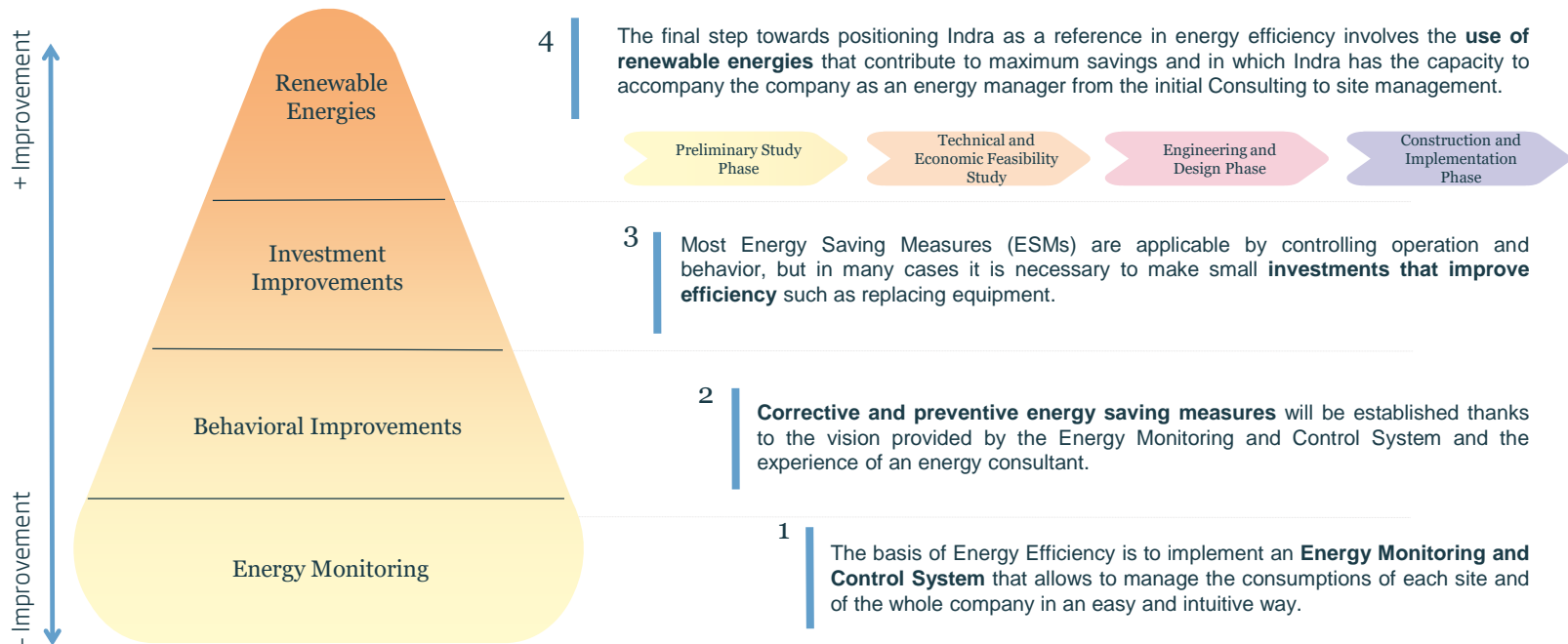
Social commitment

Depending on the particular needs:



03. Consulting: Renewable Energy

The progressive incorporation of **Renewable Energies** in the energy mix of each site has to be one of the main objectives of the companies to reduce their energy costs and to be an environmental reference in their sector.



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Mark Making the way forward

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