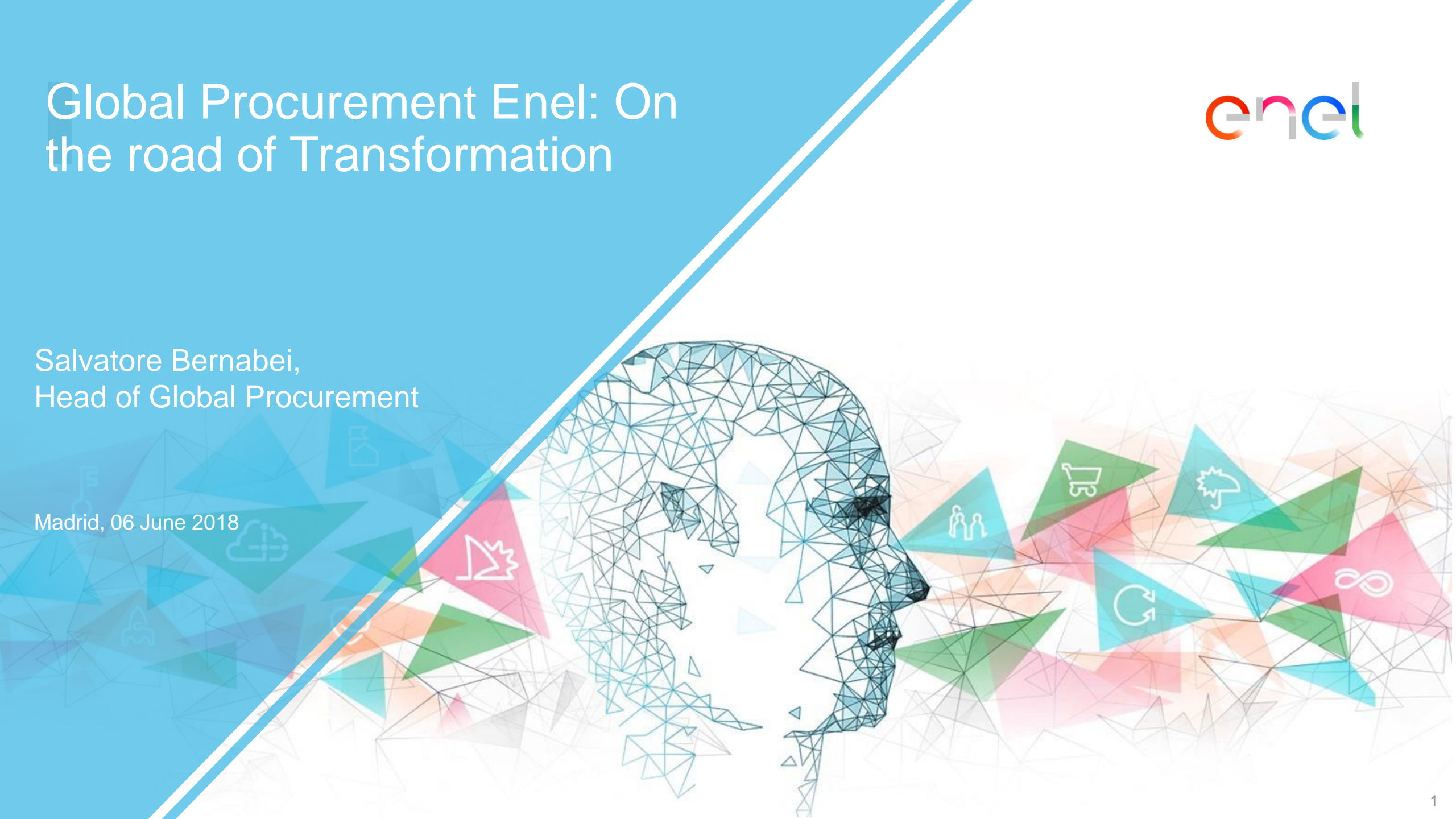


Global Procurement Enel: On the road of Transformation



Salvatore Bernabei,
Head of Global Procurement

Madrid, 06 June 2018



Agenda

Suppliers day, Madrid 2018

The background features a large, faint wireframe map of Europe. Overlaid on this are several colorful, semi-transparent geometric shapes, primarily triangles and polygons, in shades of blue, green, orange, and pink. A solid cyan rectangle is positioned on the left side of the slide, containing the agenda items.

Enel Today

Macro-trends impacting Procurement

Procurement Transformation

Agenda

Suppliers day, Madrid 2018



Enel Today

Macro-trends impacting Procurement

Procurement Transformation



Enel today



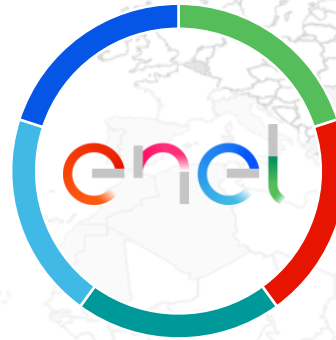
□ Countries of presence



#1 private **network** operator globally
65 mn end users and 44 mn digital meters



~20 mn free **retail** customers
#1 in Italy, Iberia and top 3 in Latam



#1 **Renewable** operator
~40GW managed capacity



~47 GW **thermal** capacity
Highly flexible and efficient assets



e-Solutions (Enel X)

+5.7 GW demand response

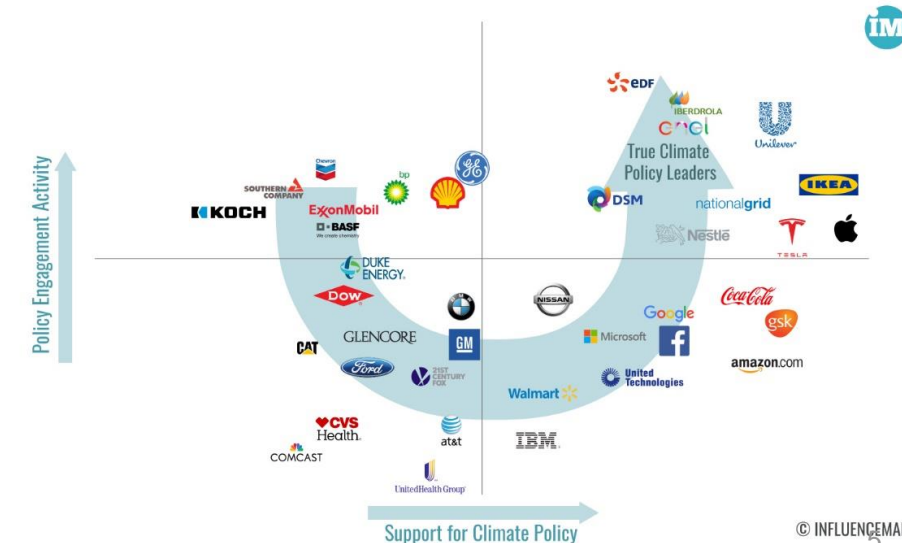
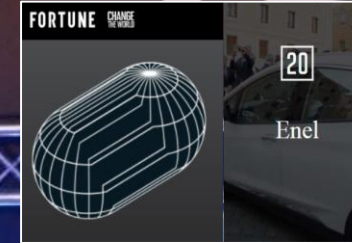
Enel today

Enel in the “**TOP-20 Companies that change the world**” 2017 (Fortune)

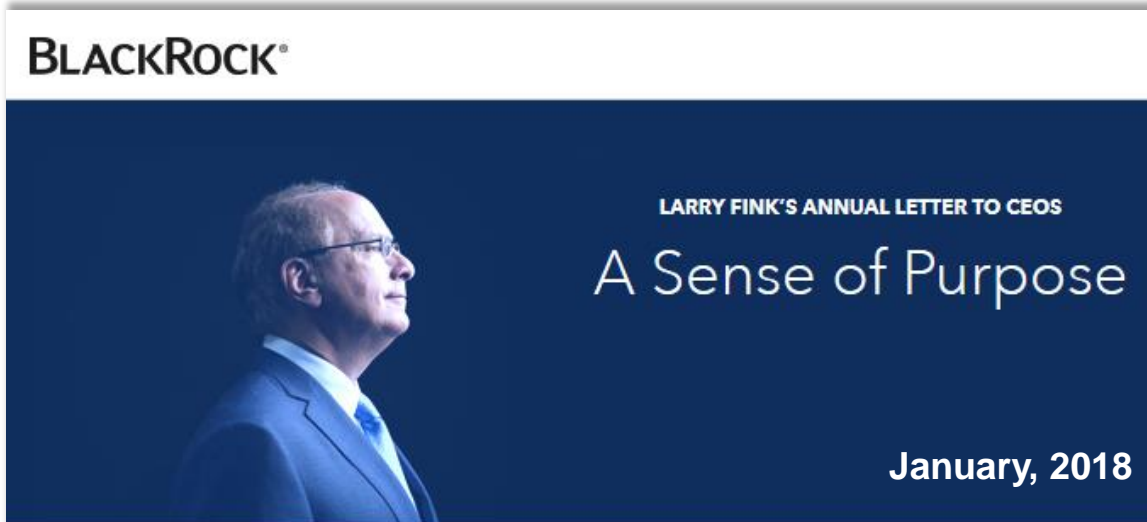
Enel in the short list 2017 of “**responsible business award**” (Ethical Corporation)

Enel as #5 company in the world that **fights the climate change** (INFLUENCEMAP)

In 2018 Enel is a finalist for the 2 consecutive year in the multinational category in “**The Circulares 2018**”, the contest of the World Economic Forum which awards the most circular institutions, leaders and multinational companies in the world. *(alongside companies such as Apple, Google, Ikea and H&M)*



Sustainability matters: a (big...) shareholder perspective



“A company’s ability to manage environmental, social, and governance matters... is so essential to sustainable growth”

“In order to make engagement with shareholders as productive as possible, companies must be able to describe their strategy for long-term growth...”

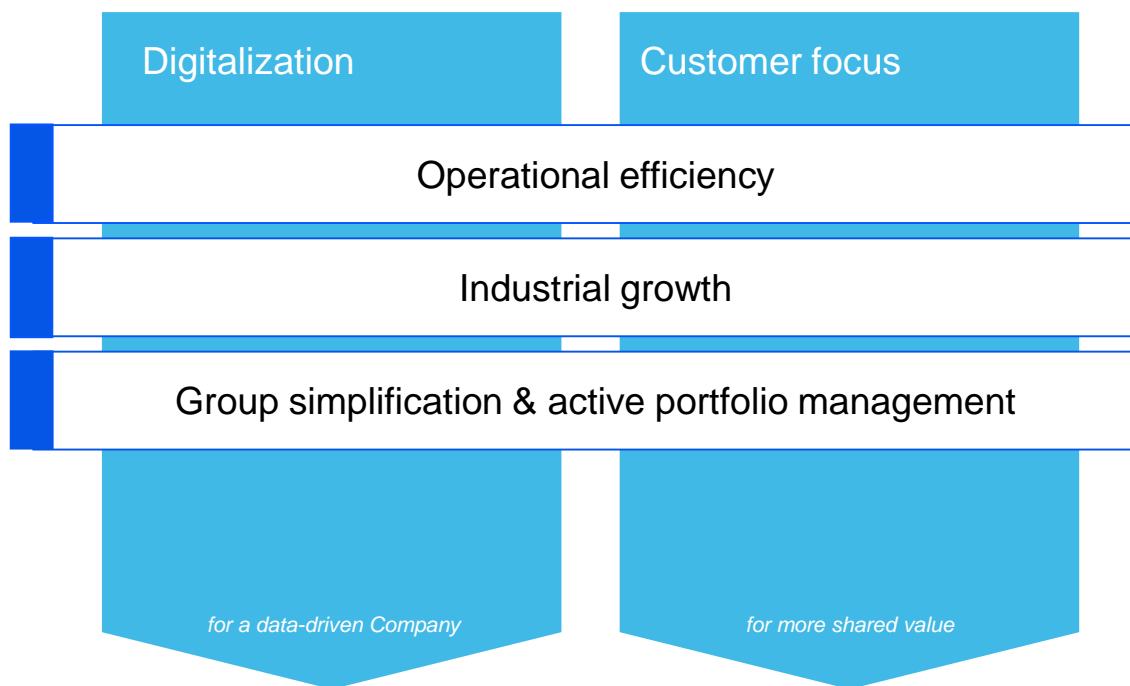
I want to reiterate our request, that you publicly articulate your company’s strategic framework for long-term value creation...”

“Society is demanding that companies, both public and private, serve a social purpose...”

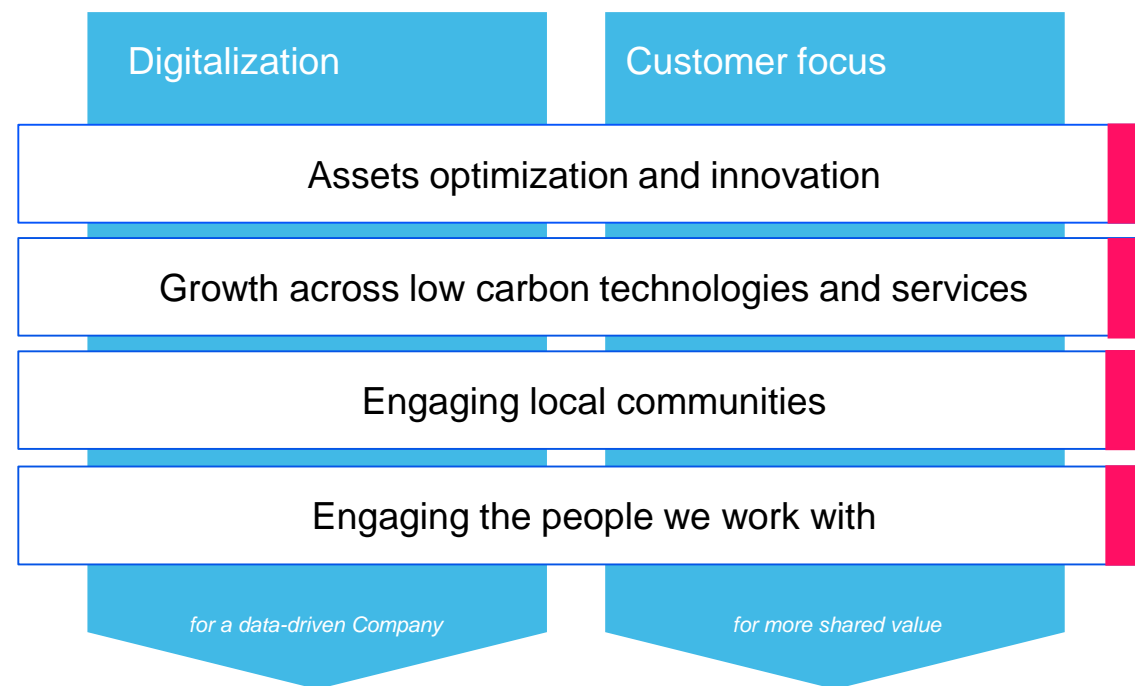
Enel framework: a single strategy with industrial AND sustainability pillars for long-term value creation



Industrial



ESG: Environment, Social, Governance



Sustainable long-term value creation

Delivery: a sustainable strategy



Enel commitment to the global SDGs



800,000 beneficiaries by 2020



3 million people by 2020, mainly in Africa, Asia and Latin America



3 million beneficiaries by 2020



< 350 gCO₂ /kWh_{eq} by 2020
(-25% vs base year 2007)

Delivery

2017

2015-17



~290,000

586,000 ↑



~490,000

1.74 million



370,000

1.5 million ↑



399 gCO₂ /kWh_{eq}²

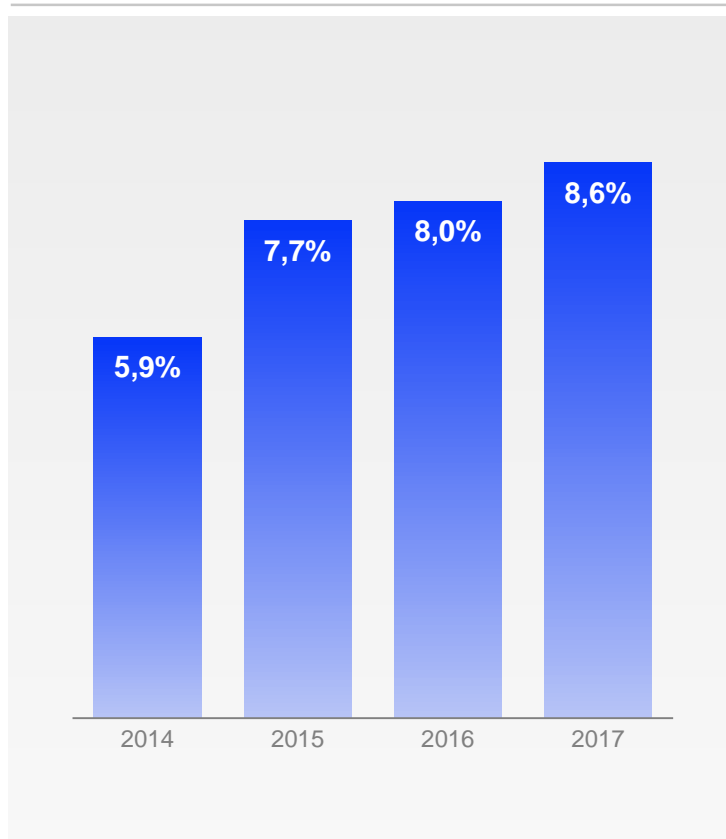
n.a.

1. Cumulated figure
2. -14% vs base year 2007. Including BSO
3. ↑ Target updated

Sustainable business pays back



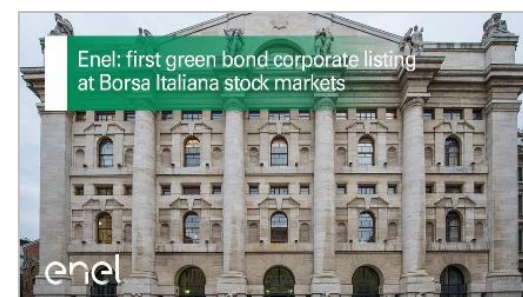
% of SRI (socially responsible investors)



Enel included in main Sustainability indices

From 2004	 MEMBER OF Dow Jones Sustainability Indices In Collaboration with RobecoSAM
From 2002	 FTSE4Good
From 2005	 CDP DRIVING SUSTAINABLE ECONOMY
From 2014	 MEMBER OF STOXX ESG LEADERS INDEXES
From 2013	 EURONEXT vigeo eiris
From 2007	 ECPI Sense in sustainability

Other initiatives and recognitions



In Jan 2017 and 2018 two “green bonds” were issued with the total value of 2,5 bn euro

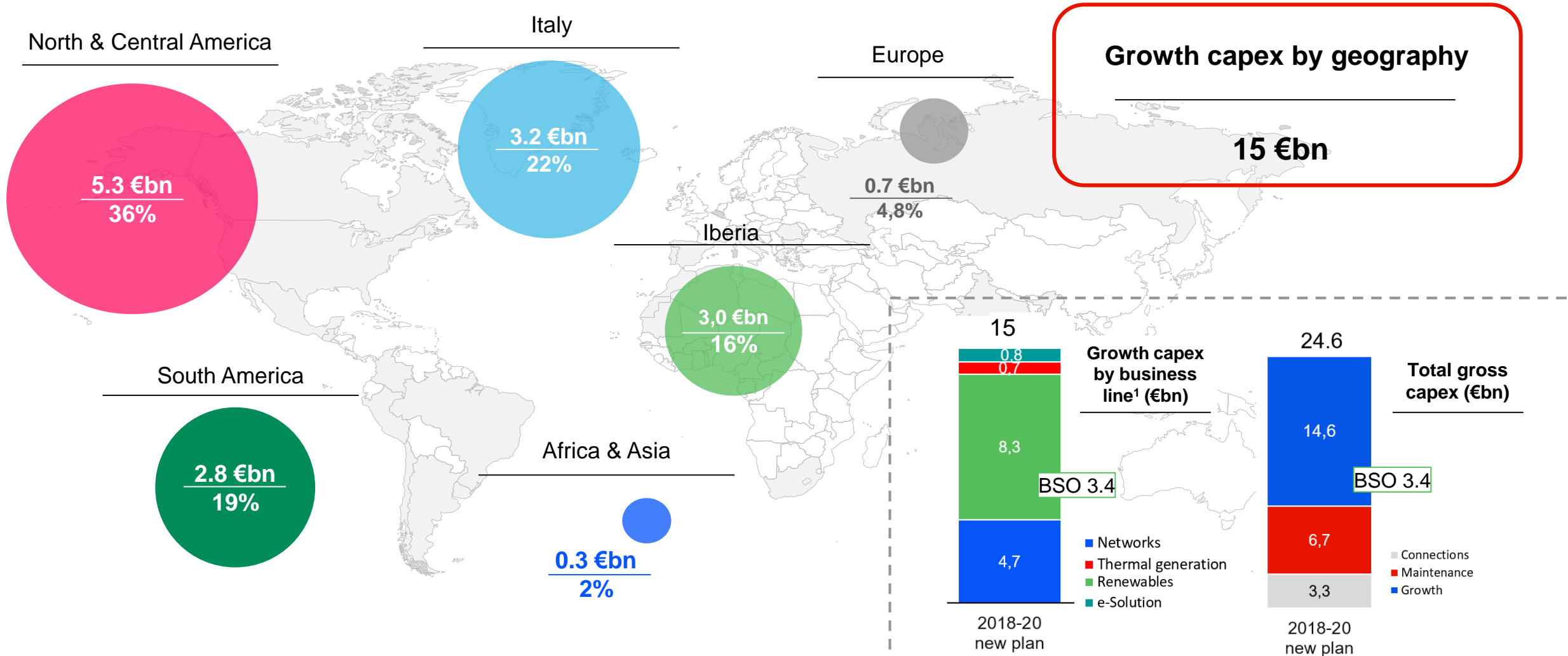
Investment (M €) **96,6**

Sustainability Projects (n) **>1200**

Beneficiaries (M people) **> 9**

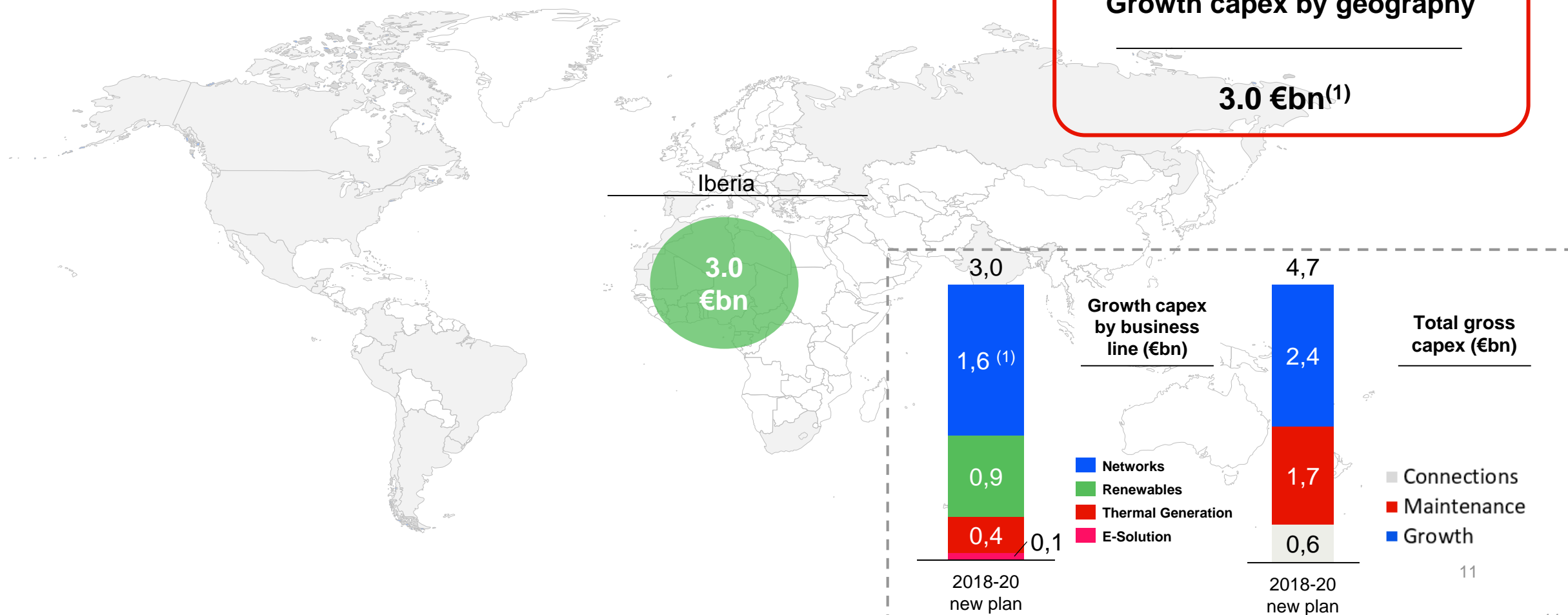
2018-2020 Strategic capex growth plan

Rebalancing capex in networks and developed countries



2018-2020 Strategic capex growth plan Iberia

Rebalancing capex in networks and developed countries



Agenda

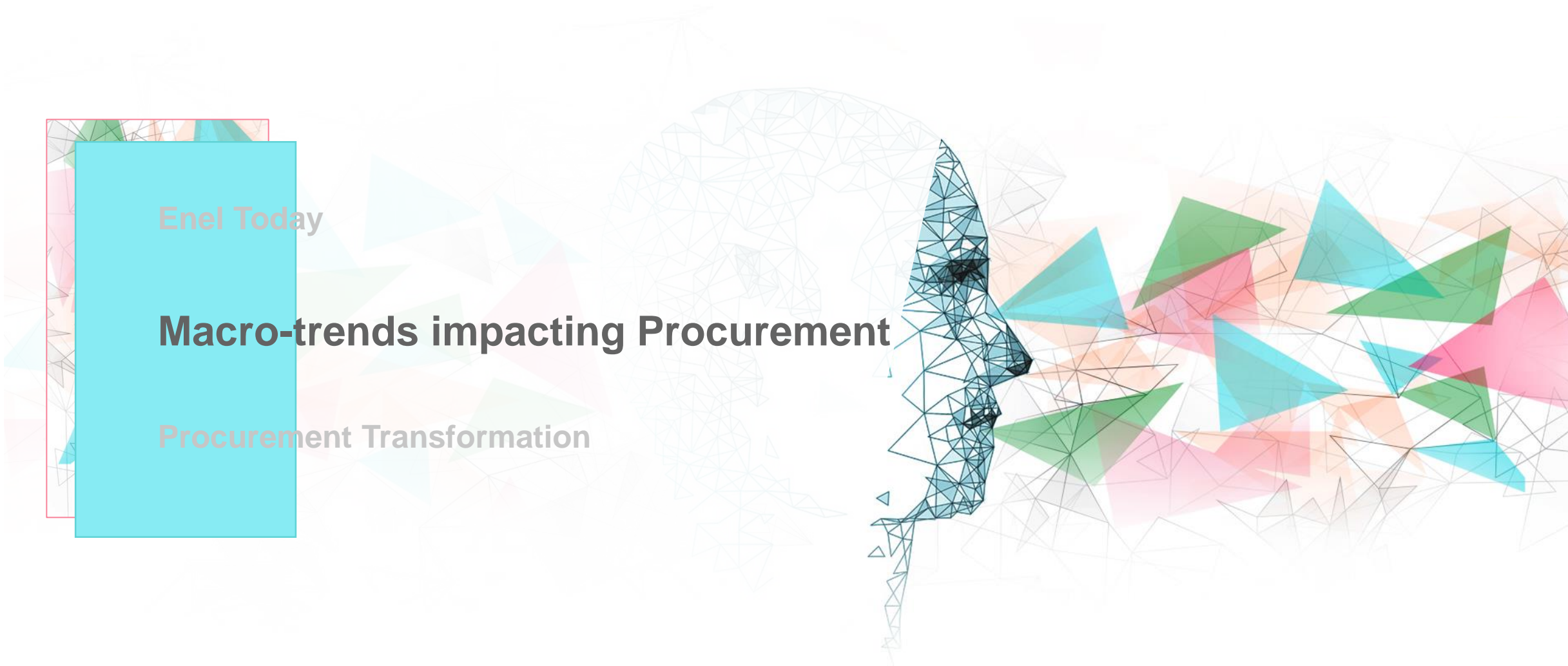
Suppliers day, Madrid 2018



Enel Today

Macro-trends impacting Procurement

Procurement Transformation



Disruptive Technologies

10 emerging/consolidating technological trends potentially disruptive across industries



X-as a service



Energy as a Service, Products as a service (e.g. Residential Storage, UPS,...), Virtual PV, **Uberization**

Digitalization



IoT, Wearables, **AR/VR, Robots & Drones, 3D Printing, Future of Work**

Automation of knowledge work



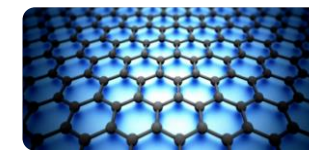
AI systems that can perform knowledge work tasks with unstructured commands and subtle judgements

Autonomous is the new smart



AI, Virtual Assistants Network Automation, **Autonomous systems** (vehicles, drones,...)

Advanced materials



Materials increasingly performant (e.g., nano-materials, graphene, piezoelectrics...)

Advanced energy storage



Li-ion and fuel cells cost reduction, integration of solar/wind power and **stabilization of grid**

Data monetization



Data Trading; **Data as a Service**; Bartering, Brokering and Business Intelligence models,...

P2P business models



Cryptocurrencies, **Blockchain**, Smart Contracts, Trading Platforms, **Fintech**

Platform business models



V2G, V1G, **Distributed Generation, DR, DSM, Marketplaces**

Health & Wellness



eHealth, Wearables, **Connected Home, Energy Harvesting**

A man in a suit is sitting at a desk, looking intently at a computer monitor. In the foreground, a chessboard with various pieces is visible, suggesting a strategic or analytical context. The scene is dimly lit, with the primary light source being the computer screen.

Macro trends impacting Procurement activity in 2018

enel

AI and **RPA** will disrupt Procurement way of working,
focusing resources on value added activities

Macro trends impacting Procurement activity in 2018



Big Data: understanding how data can add value

Macro trends impacting Procurement activity in 2018



Innovation ecosystems: to identify and leverage suppliers in joint innovation journeys

Macro trends impacting Procurement activity in 2018



Focus shift from «cost reduction» to «**value-focused**»
procurement

Macro trends impacting Procurement activity in 2018



Face-to-face interactions still fundamental to deliver stronger social learnings and achievement

Macro trends impacting Procurement activity in 2018



Risk Mitigation and resilience will take priority

Agenda

Suppliers day, Madrid 2018



Enel Today

Macro-trends impacting Procurement

Procurement Transformation



The goal of Enel Procurement is to **MAXIMIZE THE CREATION OF VALUE** in its many forms (*safety, savings, time, quality, performance, revenue, flexibility, cash flow, risk management*) and to improve the stakeholders' **END-TO-END EXPERIENCE**:

Broadening our **Buyers'** competencies, employing user-friendly technologies, recognizing everybody's contribution in a multicultural work environment based on trust and fired by passion

Engaging **Suppliers** right from the start and working together to develop innovative approaches and tools

Improving integration and communications with our **Customers** in order to provide increasingly effective solutions for the business

TRANSFORMING OUR RELATIONSHIP WITH SUPPLIERS



Procurement Manifesto: enlarging our supplier horizon by carefully **listening** to their proposals, by constantly **scouting** regardless of sector or geography, helping local suppliers **grow and expand** their range of action.



- ❑ Redefining the main supplier-related processes (*Planning, Tendering, Qualification, Vendor Rating*)

- ❑ Communication & Early Engagement (*Supplier days, pre-tender workshops, Innovation by Vendors, Design to Value,*)



- ❑ Defining together a more sustainable supply chain

- ❑ New Technologies & Tools to improve communication and interaction (*Open Innovability platform*)



- ❑ HSE Partnership

- ❑ Rewarding and incentivizing



INNOVATING TOGETHER TO CREATE MUTUAL VALUE

TRANSFORMING OUR RELATIONSHIP WITH SUPPLIERS



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INNOVATING TOGETHER TO CREATE MUTUAL VALUE

Qualification

Pillars of the new process and expected impact



Pillars of new process

Differentiated paths based on MG risk

- Fast track for low risk MGs
- Progressive checks based on risks

1 unique global qualification IT system

- Not asking documentation twice
- Direct communication with suppliers
- Exit from Repro IT System in Spain and Latam

Digitalization and Artificial Intelligence

- Artificial Intelligence to screen documents
- On-line surveys and automatic scoring

Fee simplification

- Removed when barrier to attract suppliers
- No different fee by Country and MGs

Extend duration to 5 years

- Continuous monitor Vendor Rating, open sources
- Yearly check eco-finance, sustainability (HSE)

Expected Impact:

Qualification Leadtime -70% days on average

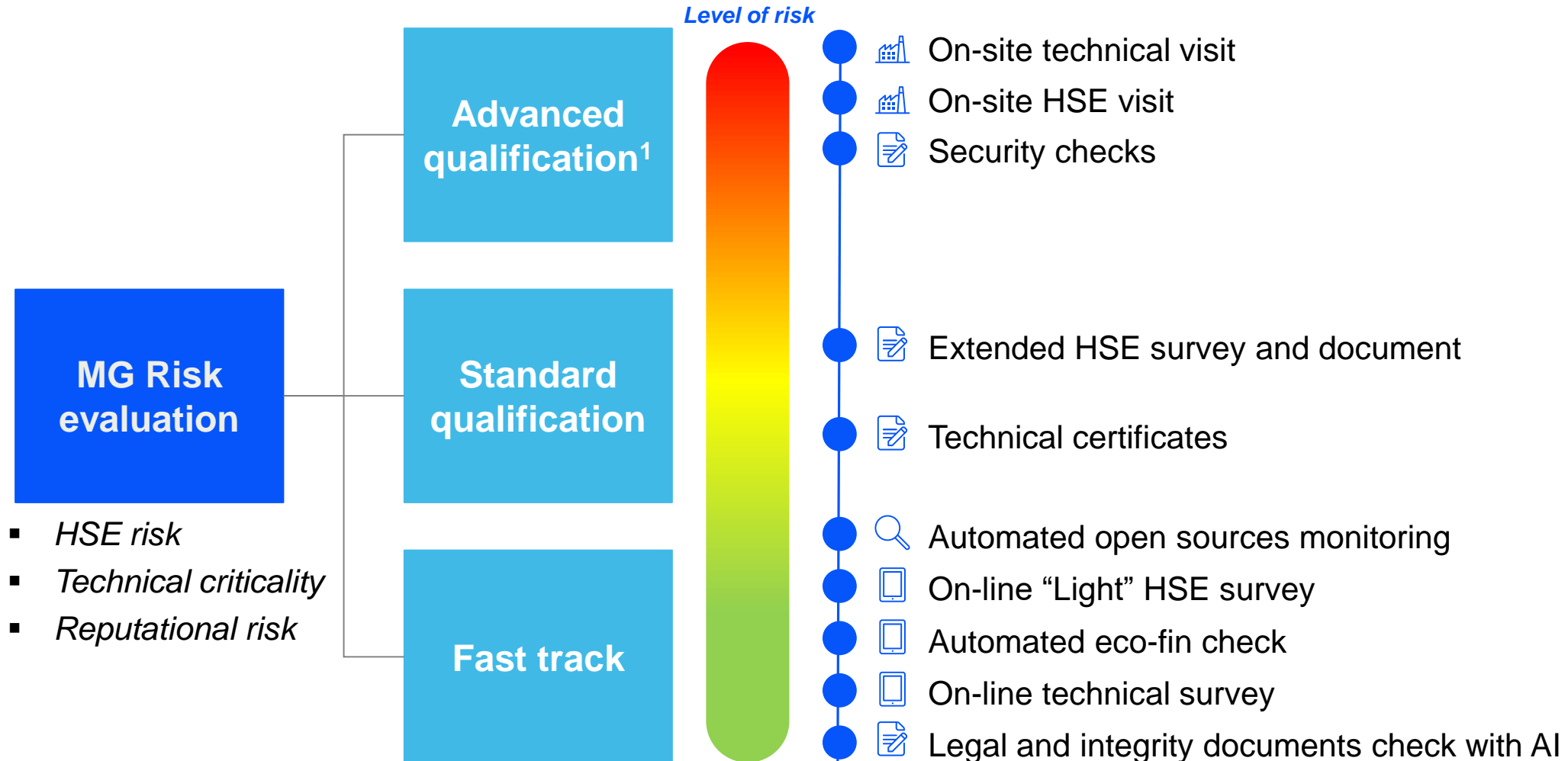
12 days average lead time of fast track

Risk mitigation

Wider qualified supplier base

Qualification

Detail on differentiated paths based on MG risk



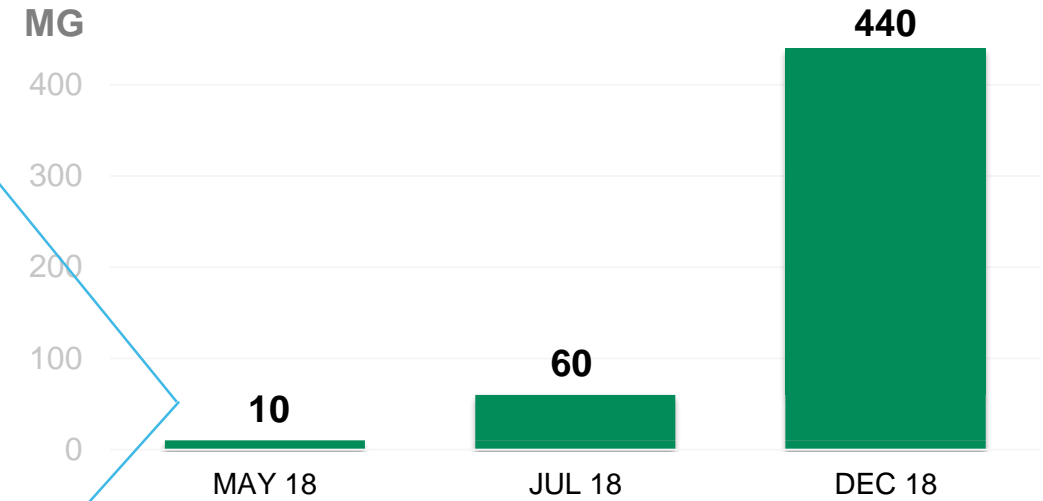
¹ On-site visit and security check performed when specific high risk emerged during qualification

New qualification procedure ramp-up plan



Activities already available for New Qualification Procedure

1. HV/MV TRANSFORMERS FOR PRIMARY SUB-STATIONS AND FOR GENERATION PLANT (HV/MV AND MV/MV) RATED POWER MAX 300MVA /220kv
2. Supply- technical assistance service related to electric vehicle charging stations and mounted installations
3. Construction of PV plants
4. Civil works equipment for wind power generation
5. Integrated metering units (ELECTRONIC METERS), low voltage data concentrators and post-meter apparatus
6. Complete primary cabins (civil and electrical works)
7. Mechanical installation of pipelines and equipment for thermoelectric plants.
8. Insulation and deinsulation
9. Electrical installation
10. Not-specialised mechanical maintenance



By Dec 2018 ca 440 MG will be available for qualification according to new procedure

New system available by the end of 2018

In 2019 Repro system will no longer be used for qualification process

Tendering

Pillars of the new process and expected impact



Pillars of new process

Differentiated paths (transactional vs. non transactional) with different level of simplification, based on:

- Contracted amount
- Complexity of technical assessment (tech K, technical offer)
- MG's risk

Strong link with qualification

- No double request of valid legal documents requested in qualification
- Only qualified supplier invited to spot orders (at steady state)

Digitalization and automation

- Integrated digital document management system
- Digital contract creation tool

Increase usage of catalogue

- Increase coverage of recurrent standard
- Improve user experience

Expected impact (end of 2018)

- **Lead time:**
 - **-70% days target on spot orders** by the end of year (16 tender procedures already completed in line with lead time target)
 - **Further potential improvement on not-transactional procurement** under finalization
- **Experience:** improvement of stakeholders experience (buyers, BLs and Suppliers) documentation

Simplifies Global Contract Conditions for **spot orders** to be implemented starting from **1 of July 2018**.

The simplification will allow a “**volume reduction**” of approx **50%** (compared to current GCC).

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- ☐ Defining together a more sustainable supply chain



- ☐ HSE Partnership



- ☐ **Communication & Early Engagement**

- ☐ **New Technologies & Tools to improve communication and interaction**

- ☐ Rewarding and incentivizing



INNOVATING TOGETHER TO CREATE MUTUAL VALUE

From needs to solutions by means of open innovation enabling tools



INNOVATING WITH STARTUPS

INDUSTRIAL PARTNERSHIPS

CROWDSOURCING

INNOVATION INTELLIGENCE

INNOVATION WITH SUPPLIERS

INNOVATION COMMUNITIES

IDEA FACTORY/INNOVATION CULTURE INITIATIVES

INNOVATING WITH ACADEMIC PARTNERS

CHALLENGE

*Based on
Business and
Staff Function
needs*



*From Solutions scouting and
testing (POC) to Handover to
business to scale up*

From needs to solutions by means of open innovation enabling tools



INNOVATING WITH STARTUPS

INDUSTRIAL PARTNERSHIPS

CROWDSOURCING

INNOVATION INTELLIGENCE

INNOVATION WITH SUPPLIERS

INNOVATION COMMUNITIES

IDEA FACTORY/INNOVATION CULTURE INITIATIVES

INNOVATING WITH ACADEMIC PARTNERS

CHALLENGE

*Based on
Business and
Staff Function
needs*



*From Solutions scouting and
testing (POC) to Handover to
business to scale up*

Innovating together with Suppliers

Suppliers from different industries involved in an **OPEN, CROSS-FERTILIZED DISCUSSION**, focusing on pre-selected critical technical challenges in order to identify quickly implementable innovative solutions (e.g. products, processes, or systems) to be jointly customized

INNOVATION BY VENDORS

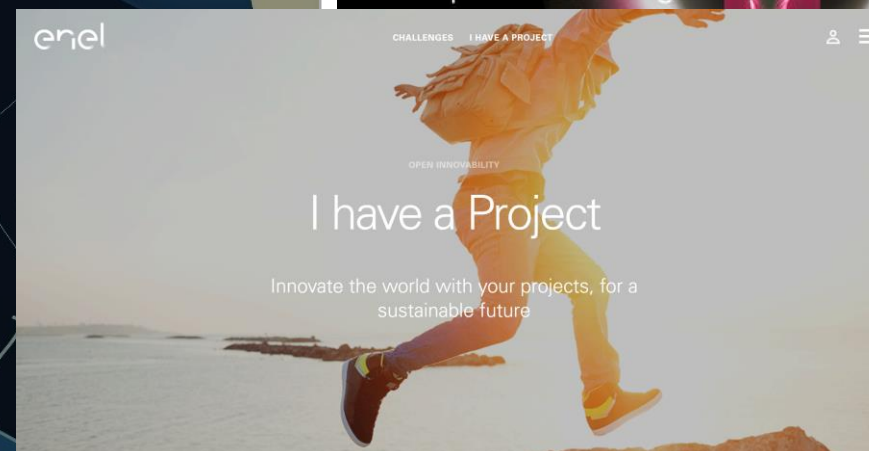
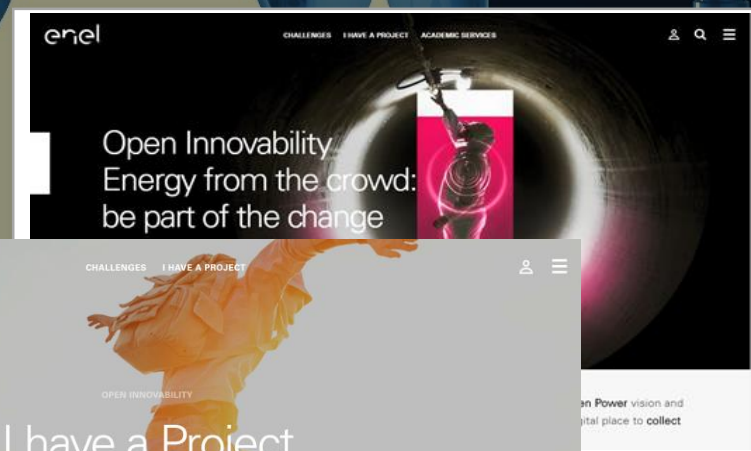
Multi-Disciplinary Team:

- Innovation & Sustainability
- Engineering and Construction
- Technical Lines
- Power Plant personnel
- coordinated by Global Procurement

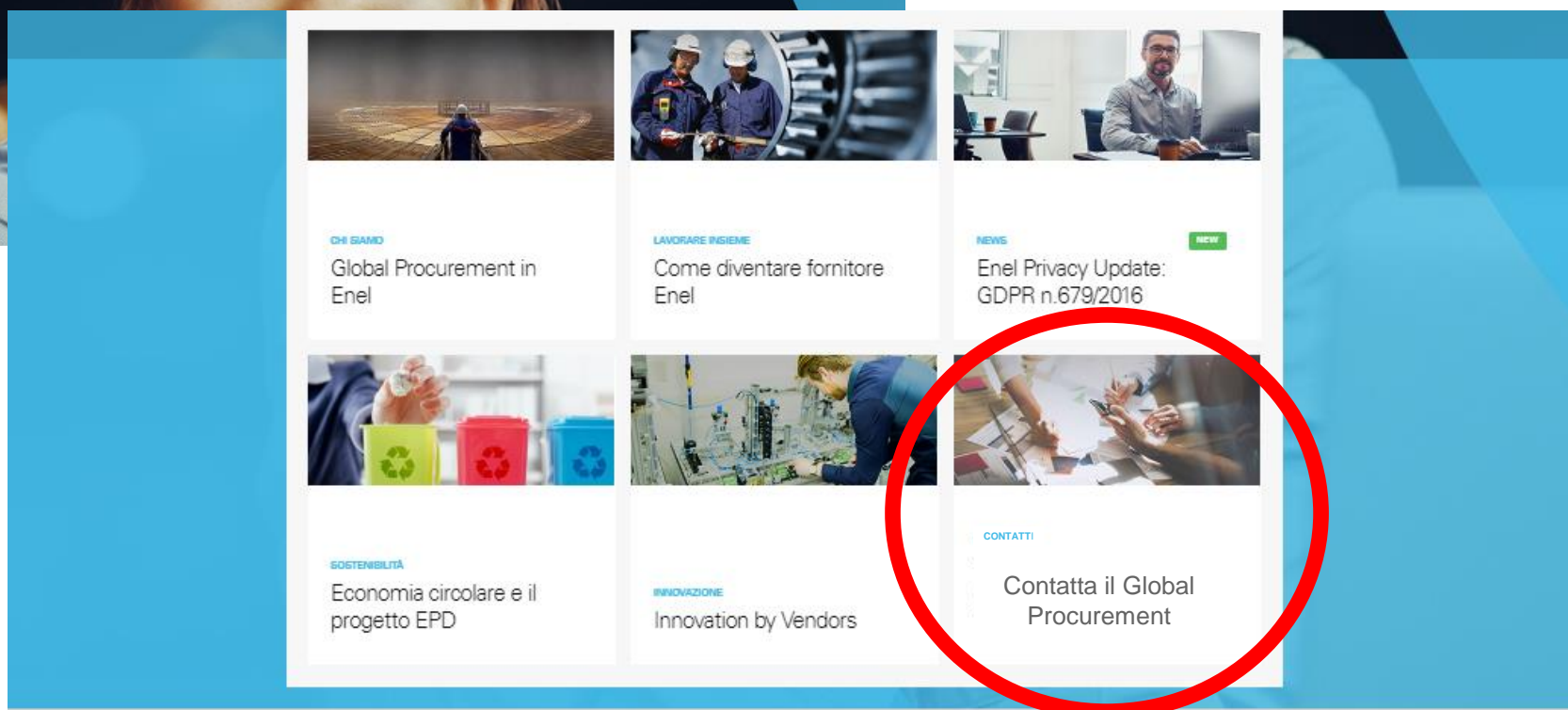
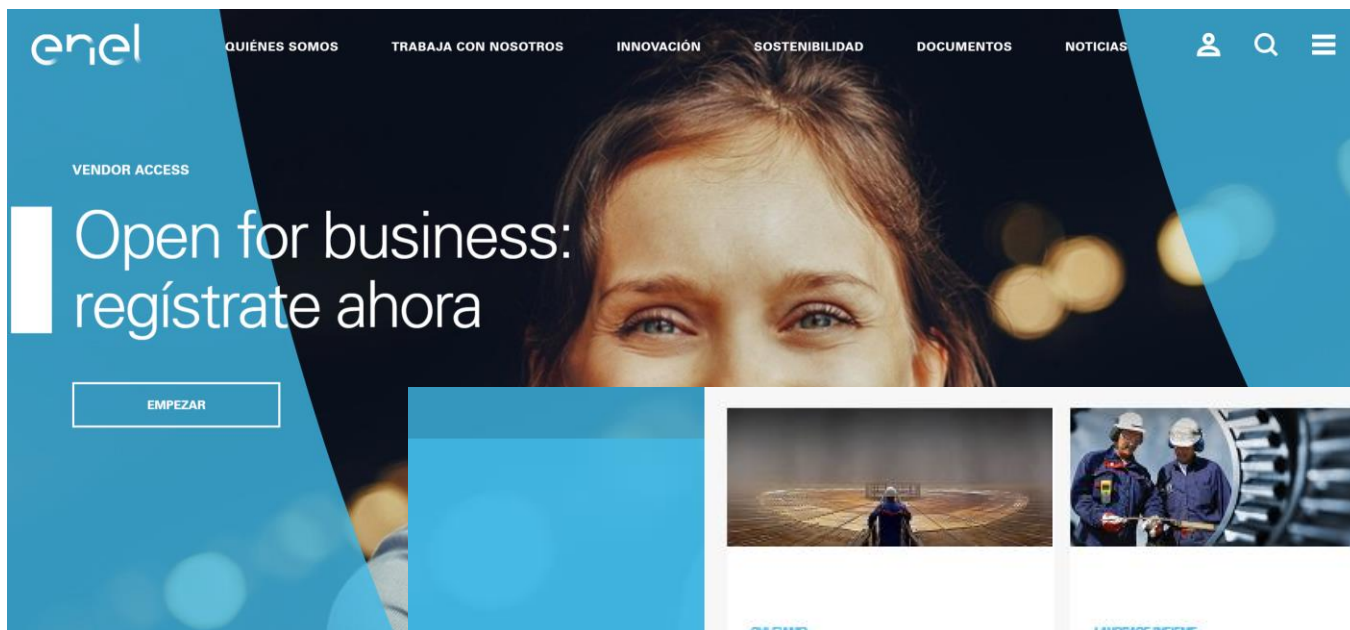
PROPOSE SPECIFIC TECHNICAL CHALLENGES TO SUPPLIERS TO DEVELOP SOLUTIONS AND IMPLEMENT THEM



OPEN INNOVABILITY PORTAL



New Open Supplier Portal



Contacta el Global Procurement

Hai una domanda o vuoi saperne di più su come Enel può aiutarti a sviluppare la tua attività?
Basta inserire le tue informazioni nei campi di seguito e verrai contattato a breve.

Se hai bisogno di assistenza immediata cerca il tuo il contatto tra [i numeri di telefono](#) del Global Procurement di Enel nel mondo

Accessibilità

Collaborazioni

Innovazione

Sostenibilità

Sponsorizzazioni

Suggerimenti

Altro

SI

NO

In cosa sei interessato ▾

Nome

Cognome

Sei già fornitore Enel ▾

Nome Azienda

Telefono

email

Lascia il tuo messaggio

Selezionando il pulsante "Invia" si autorizza il trattamento dei propri dati ai sensi dell'art. 13 del D.Lgs 196/03

ANNULLA

INVIA

HOME / CONTATTI

Contatti

Di seguito trovi l'elenco dei numeri di telefono del Global Procurement nel mondo.

- **Italia:** +39 06 8305 5500 - Servizio attivo dal lunedì al venerdì dalle 8.00 alle 18.00 (CET - CEST)
- **Slovacchia:** +421 2 58662001 - Servizio attivo dal lunedì al venerdì dalle 8.00 alle 18.00 (CET - CEST)
- **Romania :** +40 0372405888 - Servizio attivo dal lunedì al venerdì dalle 8.00 alle 18.00 (EET)
- **Federazione Russa:** +7 495 539 31 38 - Servizio attivo dal lunedì al venerdì dalle 8.00 alle 18.00 (MSK)
- **Spagna, Portogallo:** +34 914 558 838 - Servizio attivo dal lunedì al venerdì dalle 08:00 alle 18:00 (CET - CEST)
- **Argentina:** +34 914 558 838 - Servizio attivo dal lunedì al venerdì dalle 08:00 alle 18:00 (ART)
- **Brasile:** +55 85 34535199 (Enel Distribuição Ceará) Servizio attivo dal lunedì al venerdì dalle 08:00 alle 18:00 (BRT)
- +55 21 27164301 (Enel Distribuição Rio) Servizio attivo dal lunedì al venerdì dalle 08:00 alle 18:00 (ART)
- **Cile:** + 56 22 353 44 99 / Ext: 4499 Servizio attivo dal lunedì al venerdì dalle 08:00 alle 18:00 (CLT)
- **Colombia:** +57 1 601 6060 / Ext: 4903 Servizio attivo dal lunedì al venerdì dalle 08:00 alle 18:00 (COT)
- **Perù:** +(511) 517 1228/ Ext: 1228 Servizio attivo dal lunedì al venerdì dalle 08:00 alle 18:00 (PET)
- **USA:** 1-844-450-3682 Servizio attivo dal lunedì al venerdì dalle 08:00 alle 18:00 (EST - EDT)
- **Per tutti gli altri paesi:** +39 06 8305 5500 - Servizio attivo dal lunedì al venerdì dalle 8.00 alle 18.00 (CET - CEST)

Advanced levers

4 advanced levers to boost Procurement performance with new capabilities and new way of working

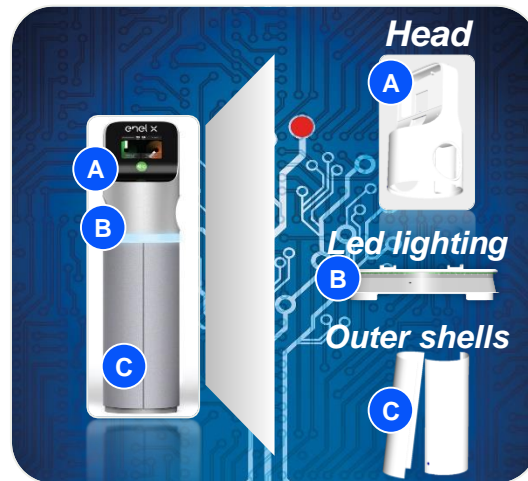


Best Cost Country Sourcing



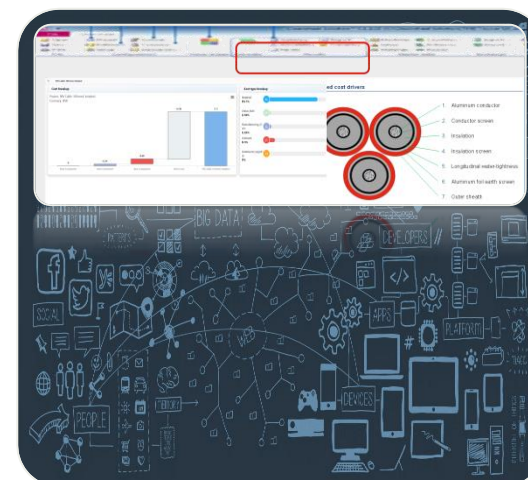
Strengthen **Global Sourcing** ensuring **optimal spend allocation**

Design to Value



Cross functional review (with Business) of **technical specifications** to **maximize the value/cost** ratio of the goods we buy, while **better matching our customers' needs**

Should Cost



Detailed and bottom up perspective of the real cost of the equipment and service we buy **to allow a fact-based negotiations with suppliers**

Should Contract

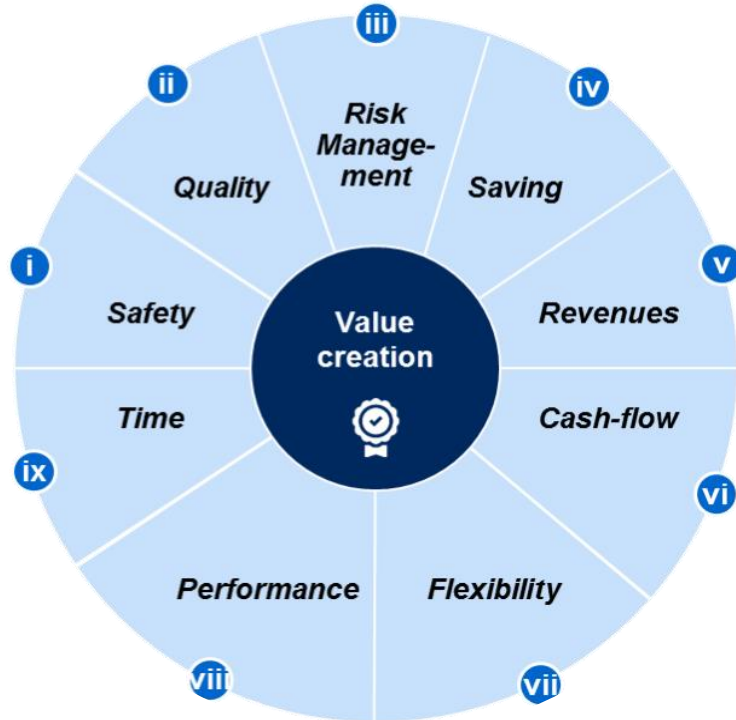


Modular contracts, alignment with the **best practices**. Focus on **mutual value creation, continuous improvement** and **risk hedging**.

Value metrics



Procurement value dimensions



Value dimensions are the starting point of the new set of Procurement KPIs, receiving input from different systems/tools.

KPIs new dashboard

From existing systems / DB

- Safety index of supplier base
- Quality index of supplier base
- Enel dependency from single supplier
- Supplier base turnover
- Suppliers pipeline readiness
- Supplier dependency

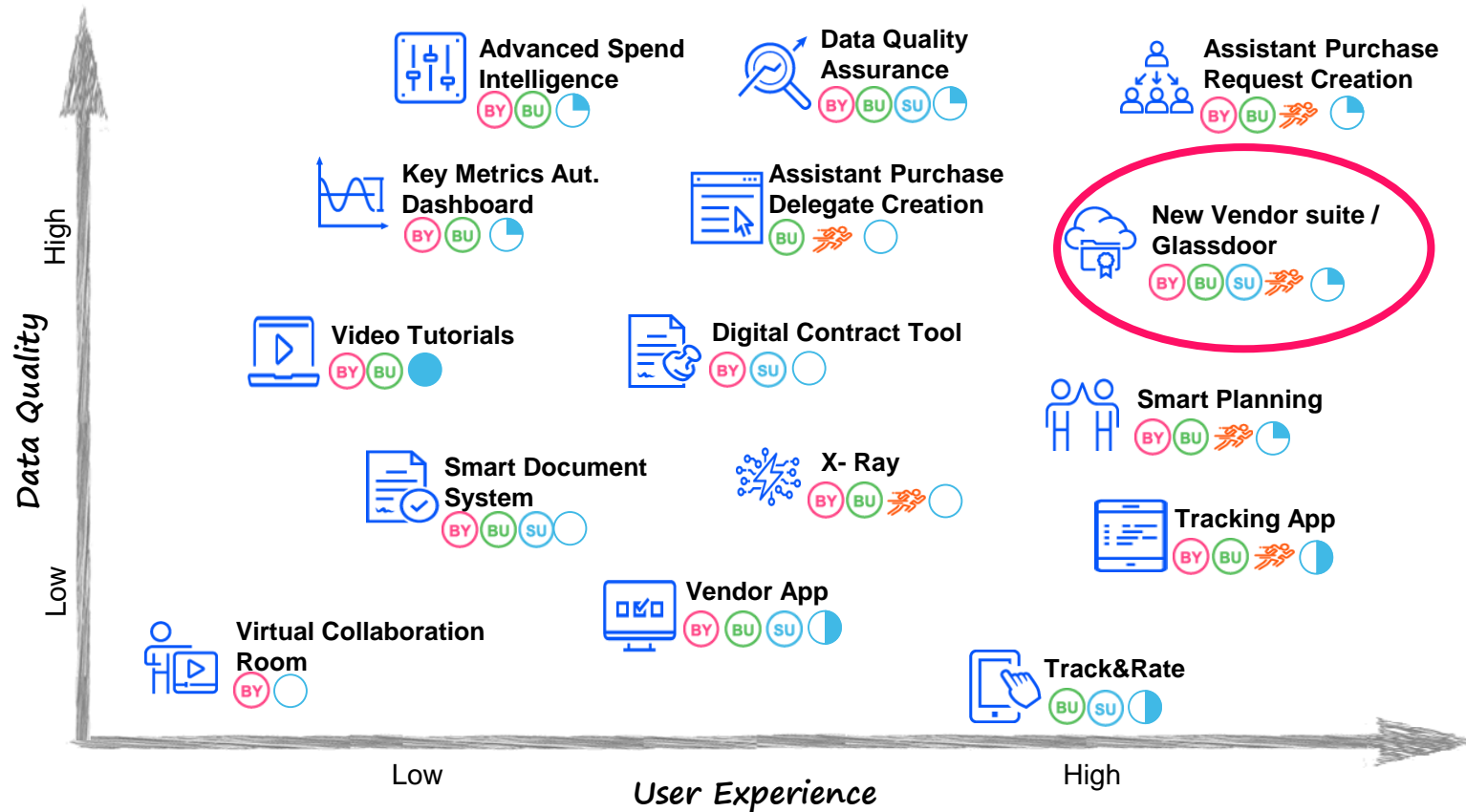
From Tender Scoresheet

- Advanced levers – DTV
- Advanced levers – Should contract
- Advanced levers – Should cost
- Tender attractiveness
- Incremental revenues
- Incremental cash flow

MOVING FROM “MEASURE TO REPORT” TO AN EFFECTIVE MODEL OF “MEASURE TO MANAGE”

Digital Procurement

....to increase data quality and allow easy interaction with stakeholders



Harvey Ball legend: To start Completed

Buyer BU Supplier Eligible agile project

- **15 transformation initiatives**
 - 1 completed (video tutorial)
 - 9 ongoing
 - 5 to start in the 2H
- **AS-IS Application Map under review (*Task 42*), driven by user experience and data quality approach**

Glassdoor

an Overview of the Vendor activities



What

A tool that allows a complete overview of all **Vendor** interactions, along its journey (like **qualifications, tenders, contracts, performances, invoicing, payments, guaranties, etc.**)



Why

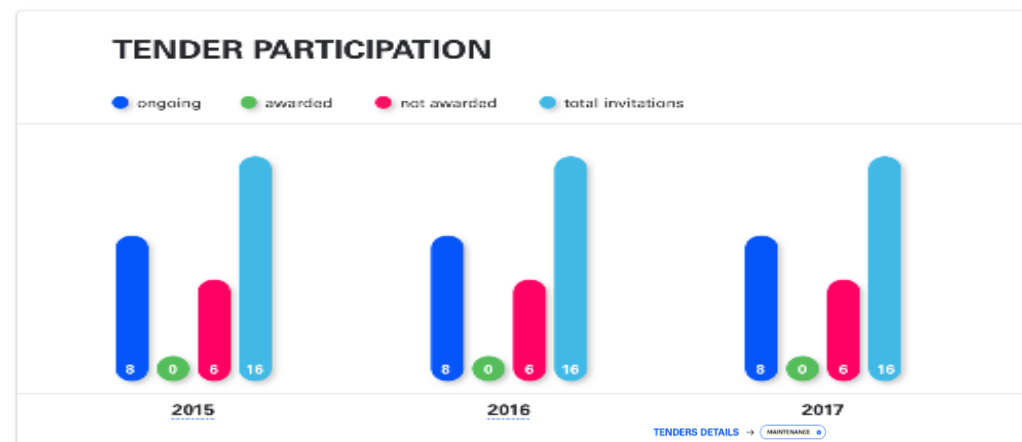
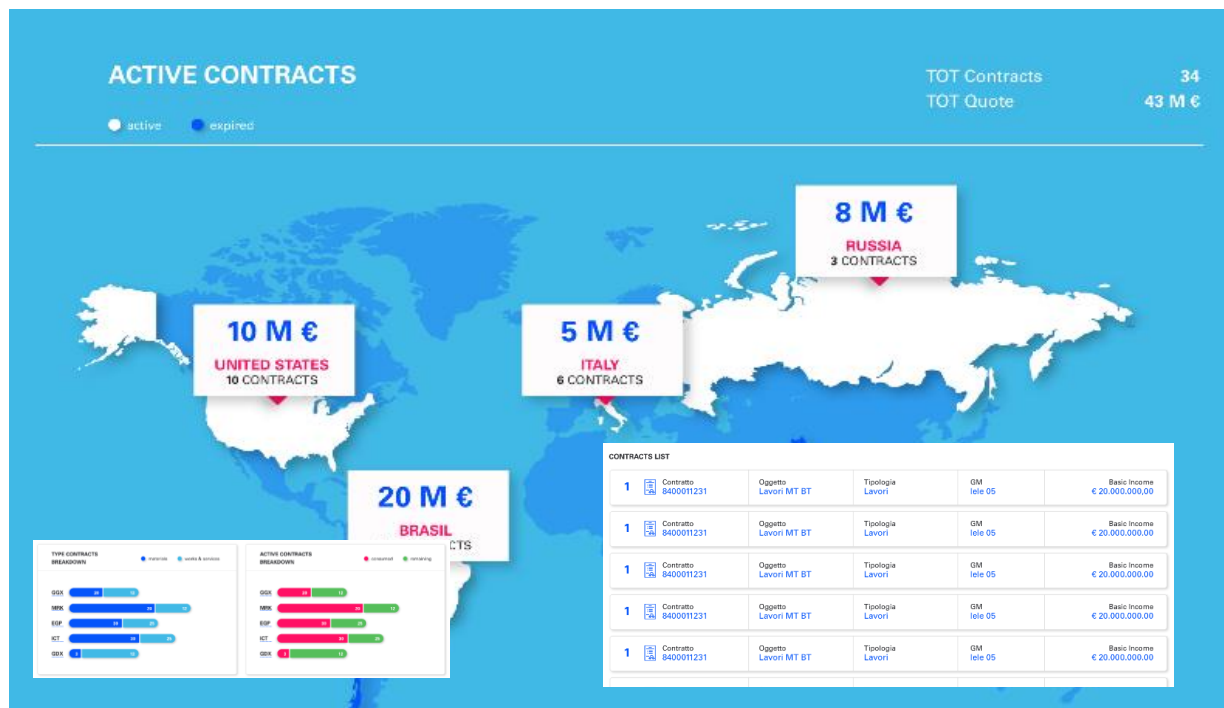
- Improvement of the **User experience** for both Vendors and Enel Users
- Guaranty Data Quality and provide a **single place** where to find information

Future

- **Visibility over** Qualification status, Tenders and Contracts activity, Payment status (expiring, pending invoices and blocked invoices), Vendor Rating performance
- **Improvement** of the user experience for the data view
- **Contacts** available for any need
- Tool **available** by the beginning of 2019

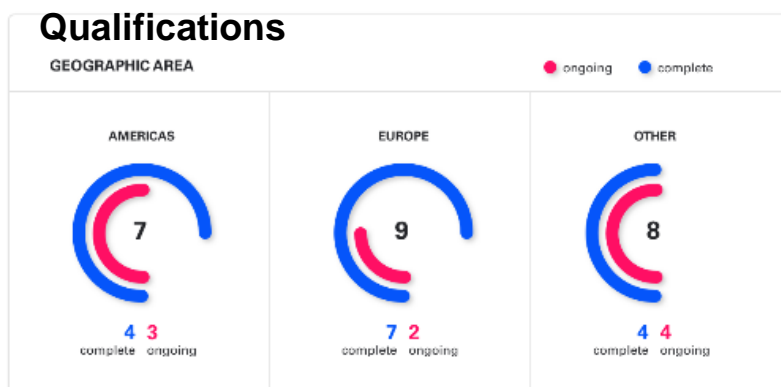
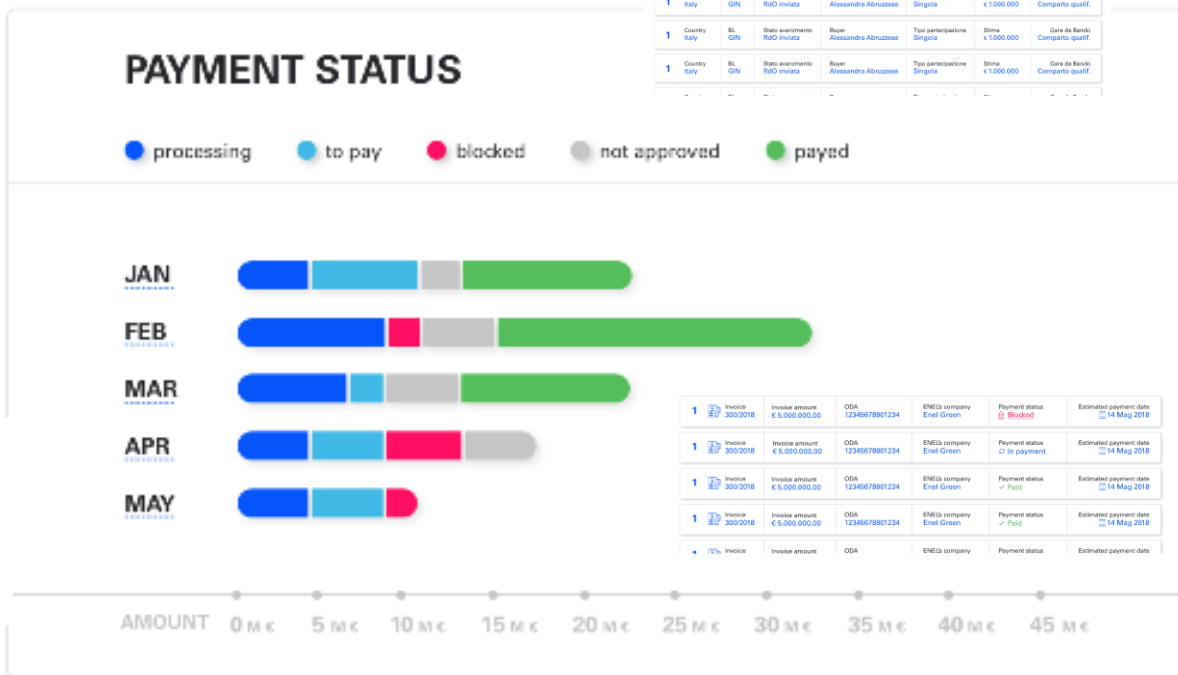
Glassdoor

Dashboard overview



TENDERS DETAILS → MAINTENANCE

1	Country Italy	BL GM	Stato incarico R/O inviata	Buyer Alessandro Abruzzese	Tip. partecipazione Singola	Stima € 1.000.000	Gara da Banco Comparto qualif.
1	Country Italy	BL GM	Stato incarico R/O inviata	Buyer Alessandro Abruzzese	Tip. partecipazione Singola	Stima € 1.000.000	Gara da Banco Comparto qualif.
1	Country Italy	BL GM	Stato incarico R/O inviata	Buyer Alessandro Abruzzese	Tip. partecipazione Singola	Stima € 1.000.000	Gara da Banco Comparto qualif.



TRANSFORMING OUR RELATIONSHIP WITH SUPPLIERS



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- ❑ Redefining the main supplier-related processes

❑ **Defining together a more sustainable supply chain**



- ❑ HSE Partnership

- ❑ Communication & Early Engagement (*Supplier days, pre-tender workshops, Innovation by Vendors, Design to Value*)



- ❑ New Technologies & Tools to improve communication and interaction (*Open Innovability platform*)



- ❑ Rewarding and incentivizing



INNOVATING TOGETHER TO CREATE MUTUAL VALUE

Implementing a coefficient (K) of Sustainability in tenders



Sustainability K is a set of requirements related to **social, environmental of H&S issues**. Suppliers who comply with these requirements receive a certain number of points which could give them a competitive advantage in the technical phase of the tender if all other technical requirements are met.

Environmental K:

- Reduction of CO2 footprint: Awareness + compensation/mitigation activities (Smart meter tender, Cables tender)
- Certification commitment (Environmental management certification UNI EN ISO 14001, Certification EMAS II Eco management and Audit Scheme)
- Usage of «green» vehicles (electric, hybrid, gas/methane)

Social K:

- Certification commitment (e.g. SA8000:2008 (social and ethical responsibility of the company), Certification BS OHSAS 18001)
- Employment of disadvantaged categories of population
- «Social clause» to prevent occupational instability in the region

Circular Economy and Environmental Product Declaration



Procurement process

Supply

Works

EPD



Sustainable work site



EPD – a declaration validated by third party in accordance with the international standards of ISO 14040 and ISO 14025 with the purpose to quantify and objectify data of the entire lifecycle of our supplies

Enel has launched the **CIRCULAR ECONOMY INITIATIVE FOR SUPPLIERS ENGAGEMENT**: based on the **Environmental Product Declaration (EPD)**, the project aims to quantify, assess and validate Environmental KPIs (CO₂, H₂O, emission..) deriving from the manufacturing cycle of a Product.

EPD benefits for the Business:

- Better monitoring of its own environmental footprint (H₂O, soil, emissions, etc)
- Measure and certify suppliers
- Reduce exposure to price and supply risk
- Improve supplier list sustainability
- Define a K Circular Economy factor to introduce in tender
- Define a circular economy qualification standard
- Reduction of costs (process control and optimization)

Benefits of EPD for Suppliers

- Become part of new community
- Define benchmark to define improvement goals
- Monitoring of environmental footprint (H₂O, soil, emissions, etc)
- Guarantee long-term business
- Attract more stakeholders and green investors



Circular Economy initiative for Enel suppliers



February 20th
WORKSHOP with suppliers

5 30 50

categories suppliers participants

Sprint 1 (2018)

Wind Turbine
Insulators
Storage
Smart Meters
Switches
Solar PV



How it works: open source PCR and EPD Certification

- ✓ During each sprint Enel Jointly with the Suppliers will develop **the specific PCR₍₁₎** to be adopted to obtain the EPD Declaration
- ✓ In the International EPD System website, all the suppliers can participate in PCR development and provide comments
- ✓ For each Merchandise Group the EPD declaration will become a qualification requirement

This process ensures transparency, open source approach, independent review of the LCA calculations

TARGET 2018-2019

- A series of one-to-one meetings with suppliers to evaluate their environmental performance calculations
- Sprint 2: 10 more product categories (cables, columns, transformers, oil, ammonia, gas turbine, pole, relay, electrical panels, storage)
- 60% total negotiated amount
- Introduce K circular economy in tenders for categories in scope
- Implement quantitative requirement in supplier qualification process (qualitative one already exists)
- Supplier community creation
- Data collection web tool implementation



(1) Product Category Rules (PCR) tell how information should be collected and calculations carried out in order to collect environmental data over the life cycle of products in accordance with the international standard ISO 14025. These documents are open to all and give information on identifying significant environmental aspects and ways to improve the environmental performance.

Committed to evolve together...

THANK YOU FOR ATTENTION!