



Terna 2017>2021 ENABLING ENERGY TRANSITION

Milan > February 20, 2017

Macro Trend



COP22

*Marrakech
Climate Change
Conference -
November 2016*

- > Implementation of **Paris Agreement** underway
- > Multilateral **cooperation** on climate change continues



United Nations

*17 Goals to
Transform Our
World*

Mobilize efforts to achieve
Sustainable Development Agenda
by 2030



Closing the loop

*EU action plan
for Circular
Economy*

“Closing the loop” of product lifecycles through greater **recycling** and **re-use**. Bring benefits for both **environment** and **economy**

Guidelines and Targets of Energy Transition




European Guidelines

Decarbonisation
Market Efficiency
Security of Supply



...to ensure that Europe has *secure, affordable and climate-friendly energy*

TARGETS

	2020 EU 20-20-20		2030 The energy bridge
			
Reduction of GHGs emissions	- 20%	- 13% ¹ ✓	- 40%
Consumption covered by RES ²	≥20%	≥17% ✓	27%
Energy Efficiency (vs BAU scenario)	+ 20%	+ 20%	+30% ³
Interconnection vs. installed capacity	≥ 10% ⁴	≥ 10% ⁴	≥ 15% ⁵

Investor Relations

1. Target for Italy related to Effort Sharing Decision
2. Share of renewable energy in percentage of gross final energy consumption (transport + electricity + heating & cooling)

3. Proposal EC Winter Energy Package (target previously set at 27%)
4. "Barcelona criterion" from the European Council of 2002, in Barcelona
5. Single Member State target under study by EC

Our contribution to the Energy Transition

Differentiating through a **shared innovation process**

CLUSTERS



Transmission Technologies
Electric Power System Operation
Grid & Markets Development
Smart Grids (*i.e. Smart Islands*)
Business Improvement

PARTNERSHIPS



Start Up & SMEs
Academy & research centers
Energy sector & Infrastructures
Supply chain

demonstration cases – interconnection - interdisciplinarity

Open Innovation

Tools to turn ideas into new
strategic initiatives

Environment

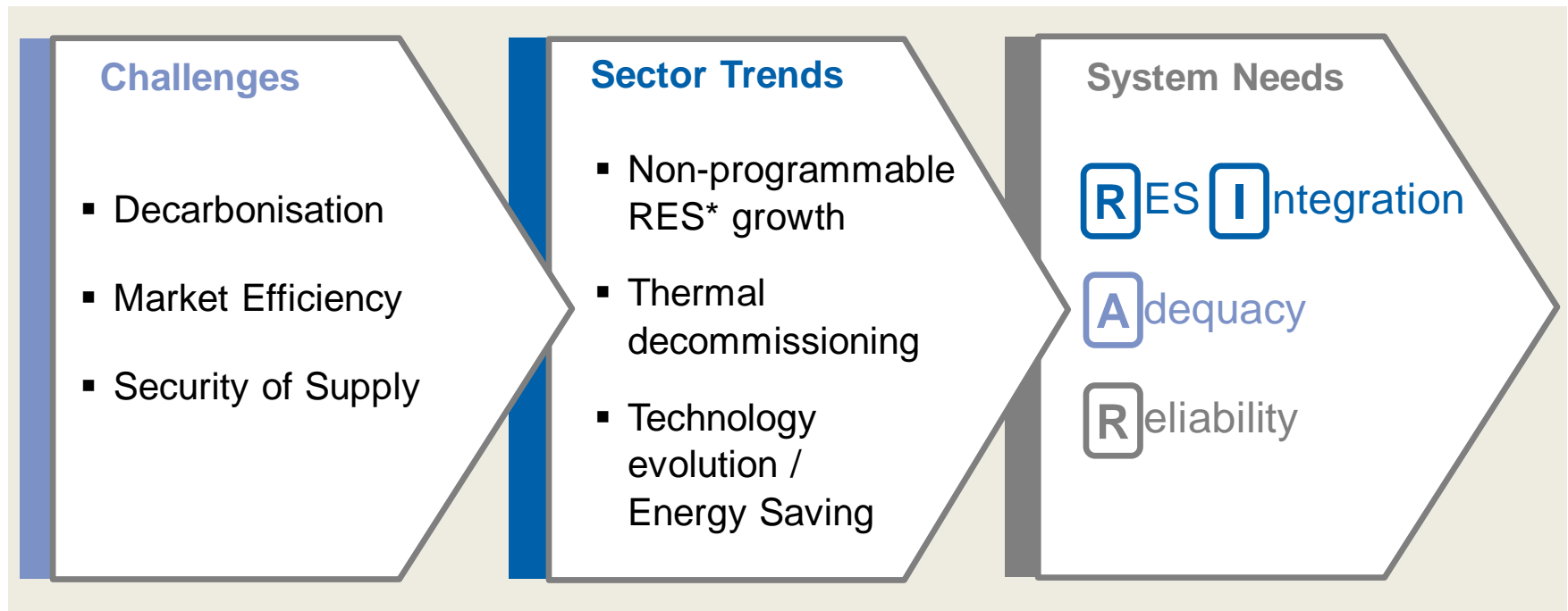
A more sustainable approach
to environmental themes
adopting stringent standards

Human capital

Attract, develop and retain
talents

The Energy Transition is Accelerating

NEW TRENDS TO INCREASE CAPEX REQUIREMENTS

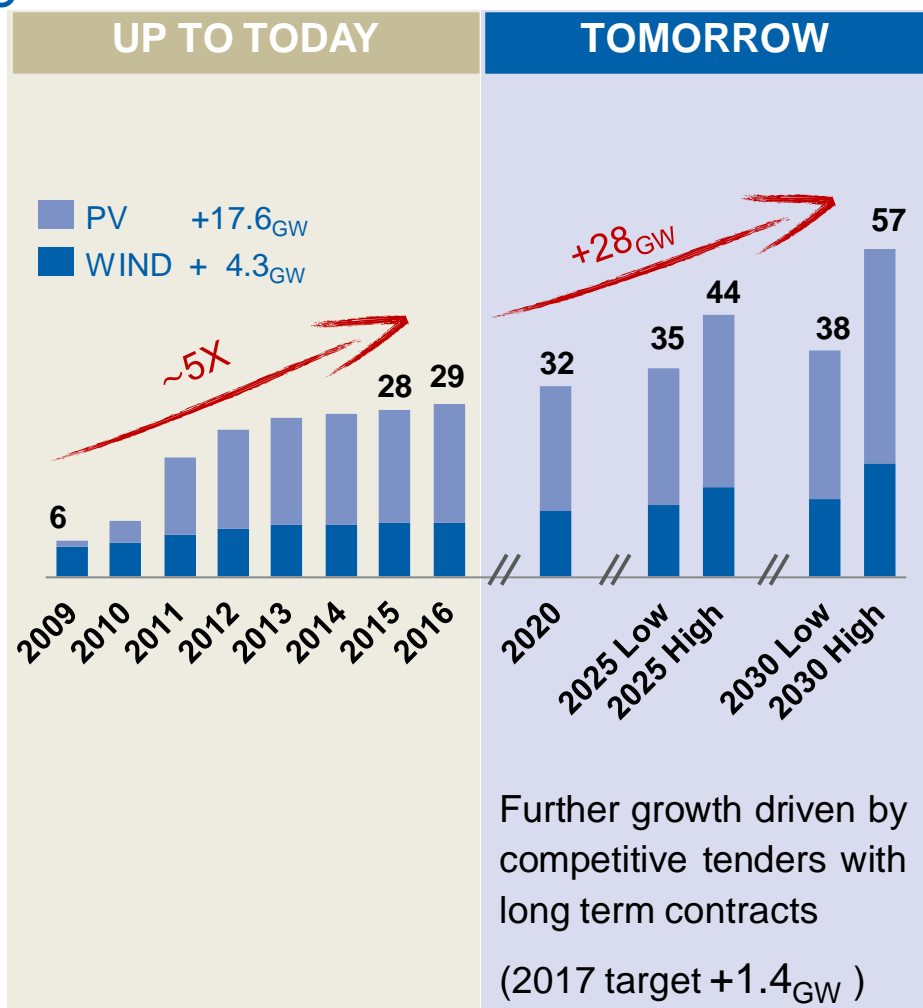


At the **lowest cost** for the System with **high quality** standards

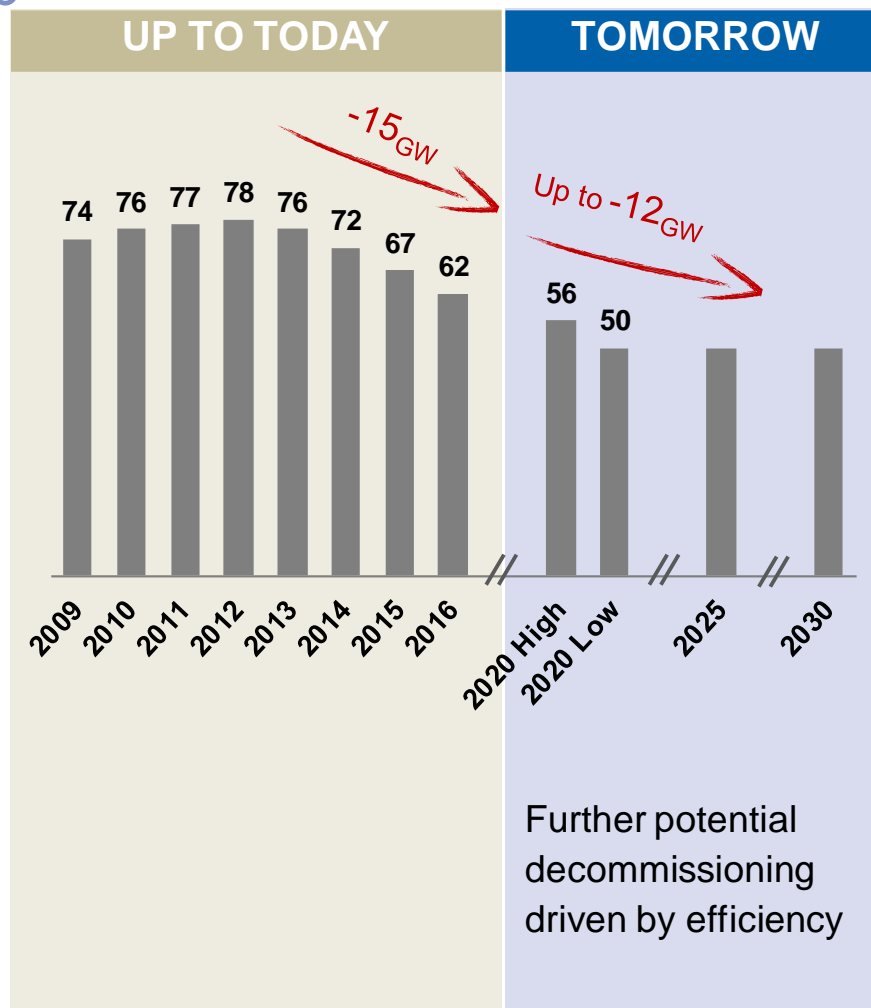
RES growing & Thermal decreasing



RES GROWTH (GW)



THERMAL DECOMMISSIONING (GW)

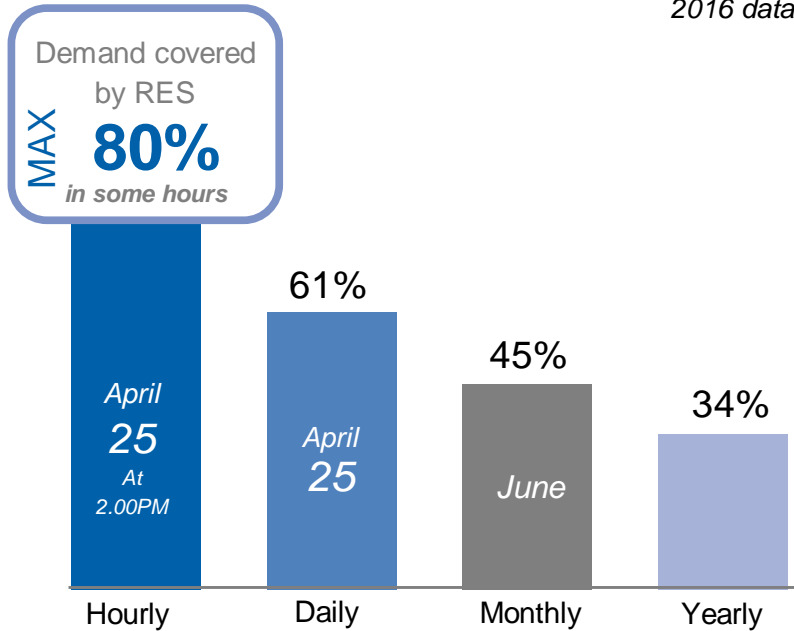


Understanding RES Integration



DEMAND COVERED BY RENEWABLES¹

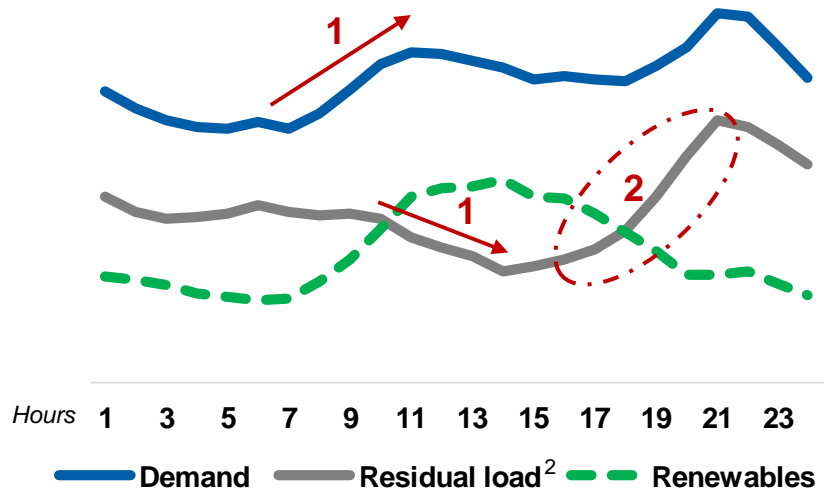
2016 data



SYSTEM BALANCING NEEDS

GW

2016



> **1** Peak inversion management

> **2** Increased complexity of ramp up management

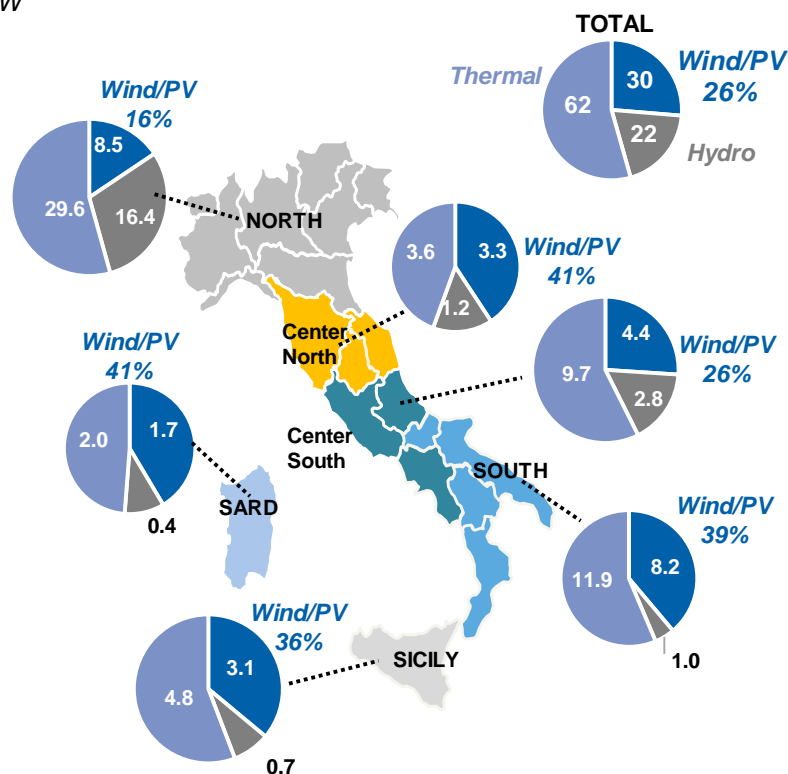
Need to integrate
RES production

REShuffling Energy Map

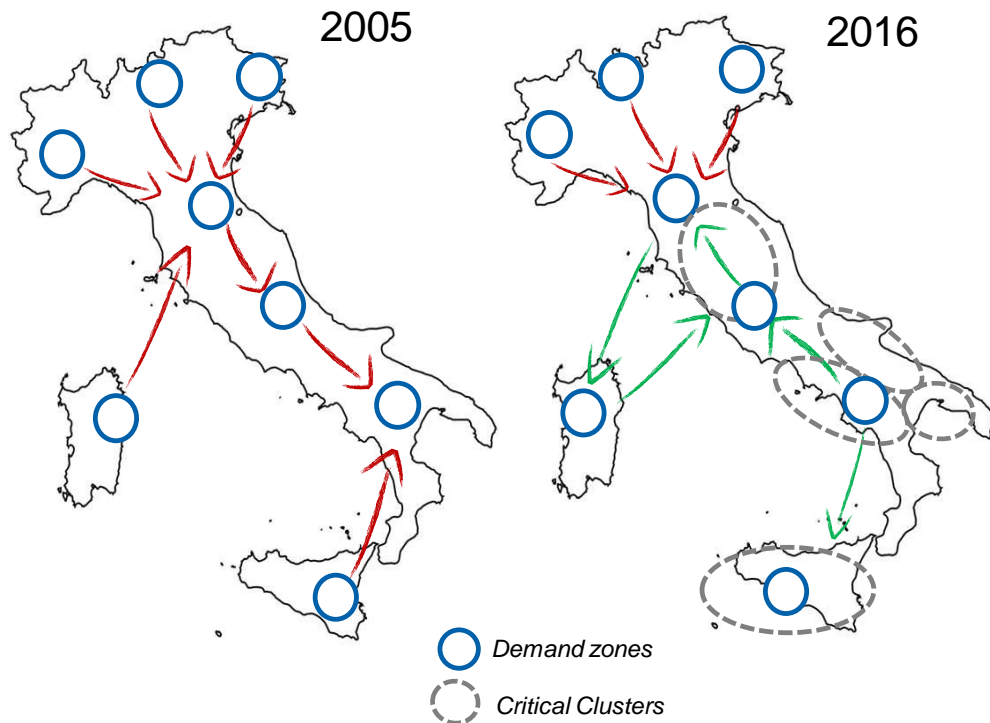


CAPACITY MIX IN THE 6 MARKET ZONES*

GW



ENERGY FLOWS



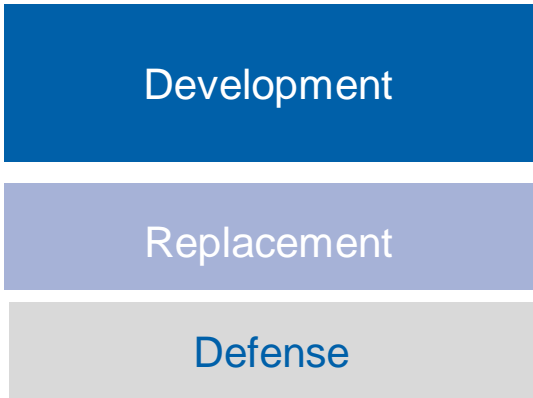
- > Not homogeneous renewables distribution within the Country (concentrated in the South)
- > Need for RES integration and new grid reinforcements on the backbone for South-North energy flow

Avoiding Adequacy and Reliability Issues



Transmission Operator	Interconnections and Private Interconnectors	<ul style="list-style-type: none"> > In the Plan: Italy-France, Italy-Montenegro, SACOI3 (Sardinia-Corsica- Italy) and Italy-Austria > Under Study: Italy-Switzerland, Italy-Tunisia and Italy-Slovenia
	Internal Reinforcements	Transmission capacity increase on a zonal and local basis
	Replacements	<ul style="list-style-type: none"> > Mitigation of risks of service interruption and increase eco-sustainability > Supporting maintenance through digitalization
System Operator	Capacity market	<ul style="list-style-type: none"> > Selected counterparties to receive a premium (€/MW-year) for their capacity obligations > Terna will run the Capacity Market auctions (first expected by YE2017)
	Digital Grid solutions	Demand response, just-in-time metering and storage solutions to increase security of supply

A Stronger Grid for Energy Transition

RATIONALE	TYPE	REGULATION
<ul style="list-style-type: none"> ▪ Cross-Country Interconnections ▪ Congestions' resolution <ul style="list-style-type: none"> - <i>zonal</i> - <i>local</i> ▪ Renewables Integration ▪ Defense and quality of service ▪ Reliability ▪ Digitalisation 	 <p>Development</p> <p>Replacement</p> <p>Defense</p>	<ul style="list-style-type: none"> ▪ Investments with high system benefit ▪ Terna new capex plan already compliant with the new CBA 2.0 methodology ▪ Transition from input to output-based and Totex

Benefits for the System to drive Capex Plan

Reconfirming Mission and Strategy – Executing the Plan

Growth in *Domestic Regulated* to facilitate Energy Transition and leverage on core expertise to seize opportunities in *Non Regulated & International*

Priority List

1

Domestic Regulated business

⇒ *New capex needs to enable energy transition*

2

New Regulation

⇒ *Potential new source of outperformance*

3

Domestic Non Regulated business

⇒ *Energy Solution Provider*

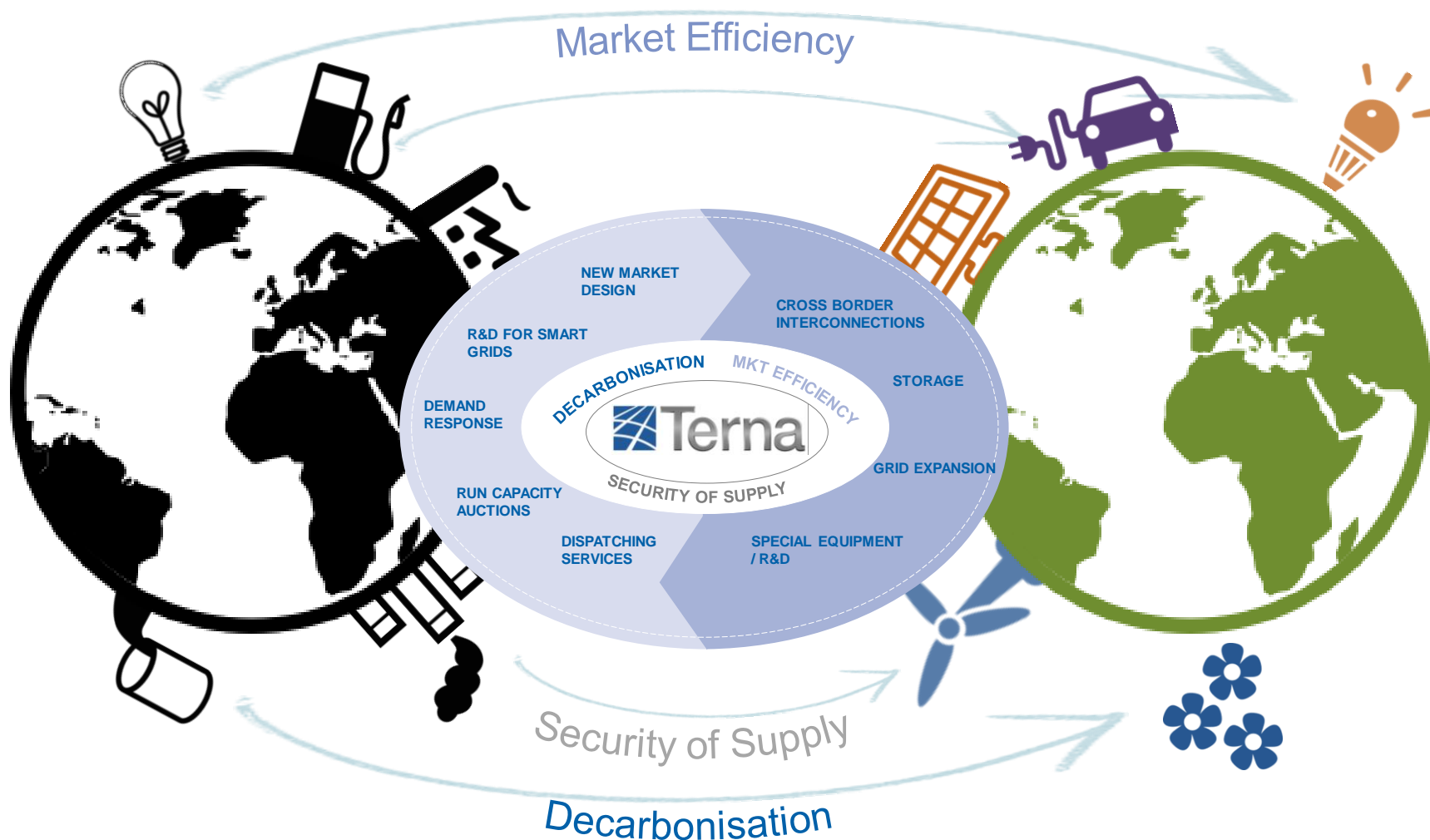
4

International

⇒ *Low risk potential upside*

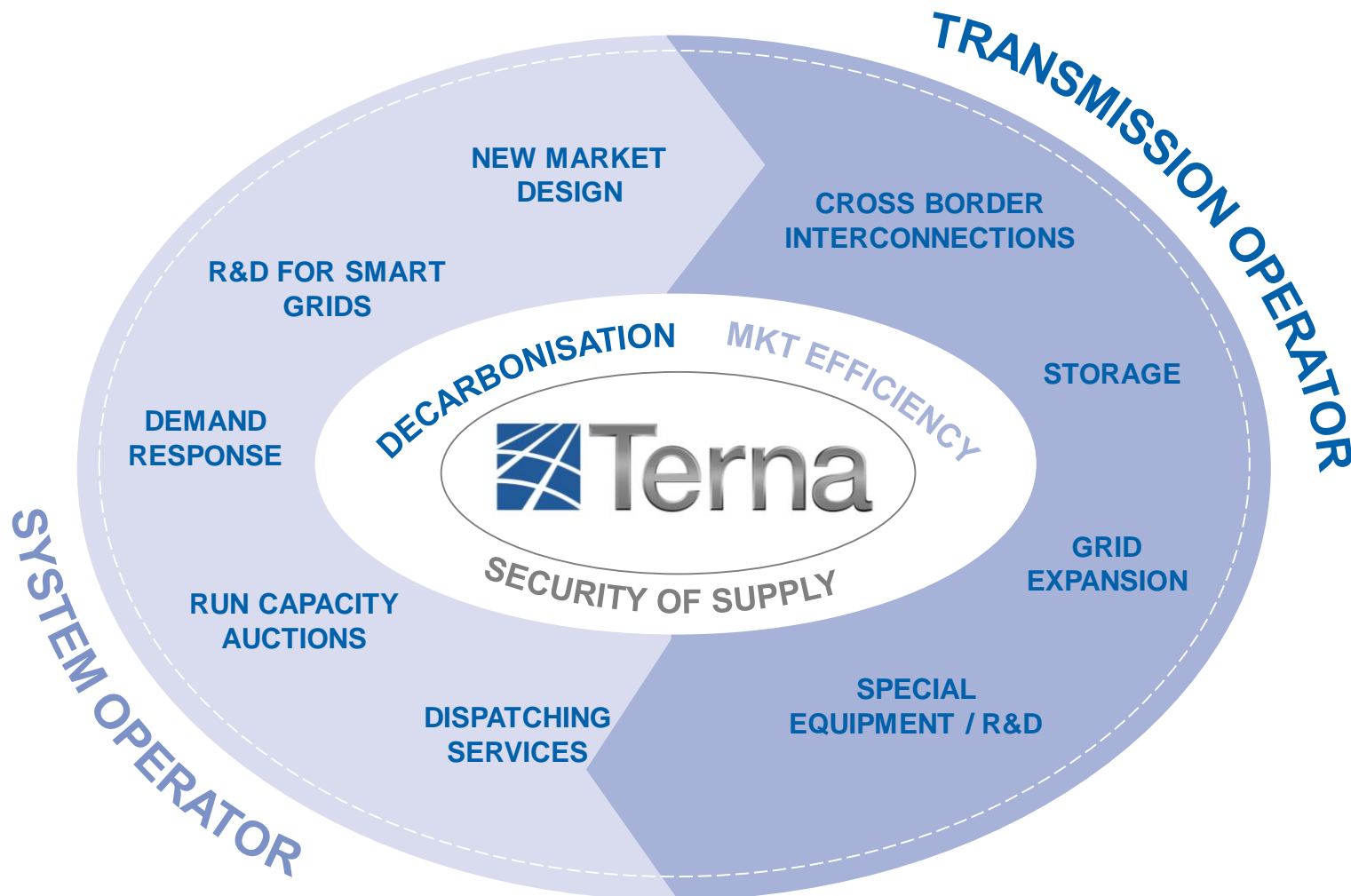
Maximising
shareholders'
remuneration

Energy Transition Ongoing...

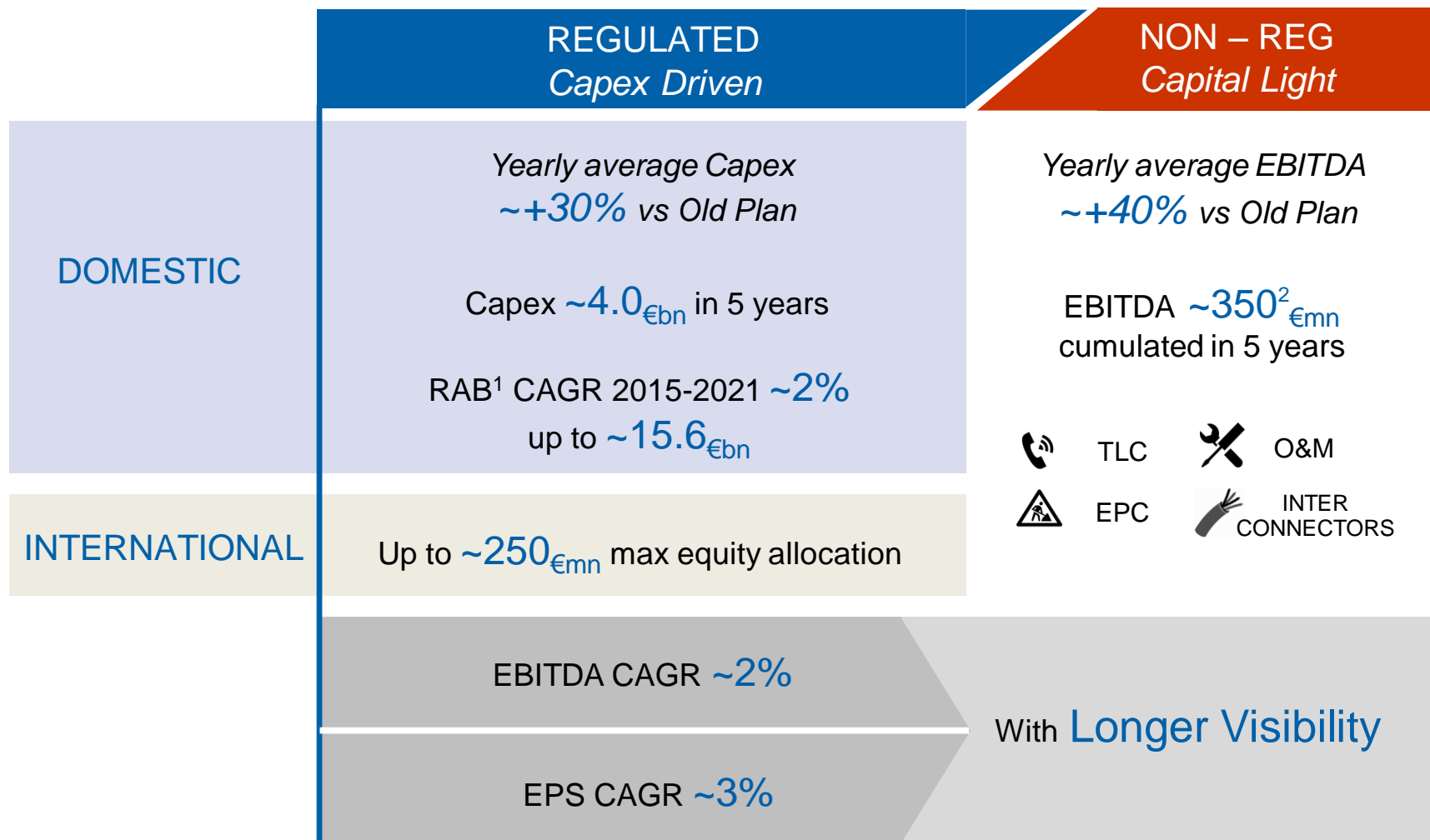


Enabling Energy Transition

Flexible Toolkit



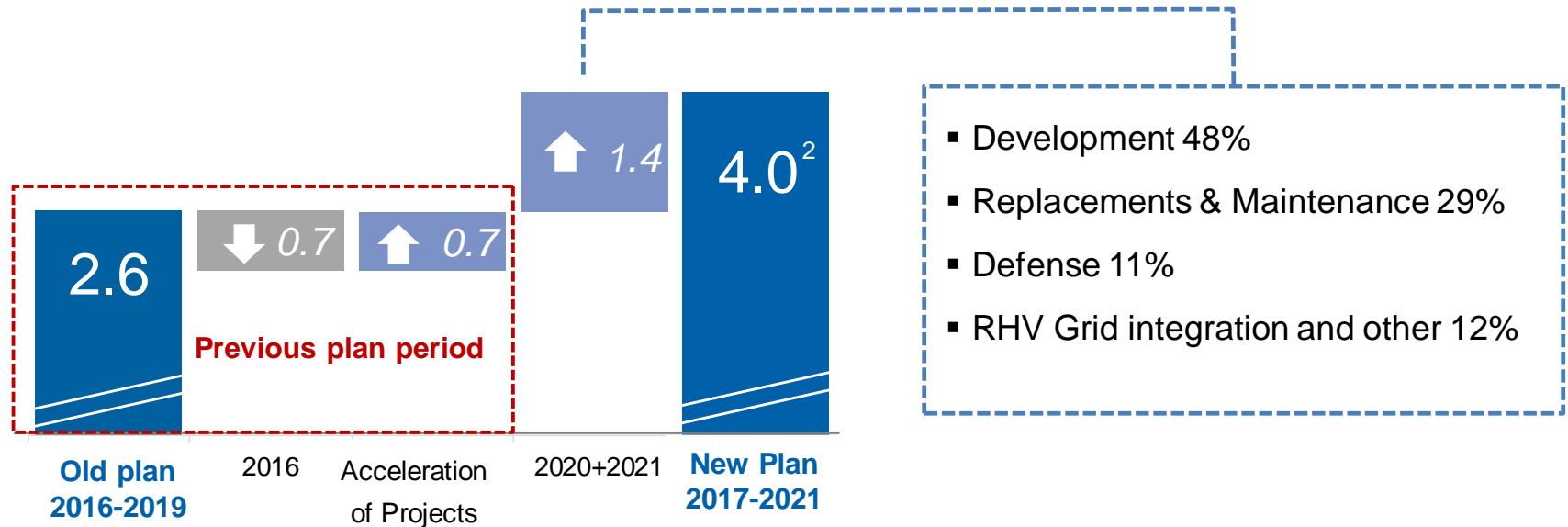
2017-2021 Confirming Safe Organic Growth



Regulated Capex Plan 2017-2021

CAPEX PLAN EVOLUTION¹

€bn



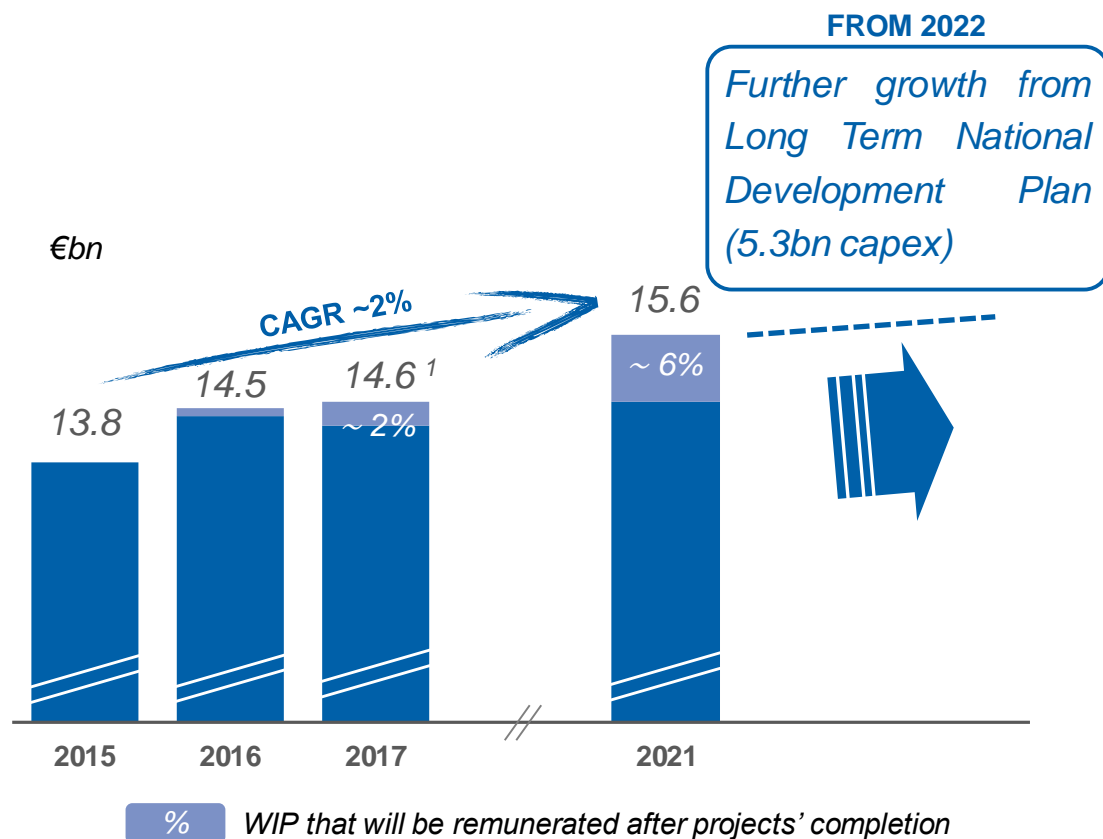
Average annual investing **~+30%** vs Old Plan

Calendar RAB Evolution

> Investment activity to support long-term RAB growth

> Total RAB at **15.6€bn** in 2021 (inflation at 0.7% on average)

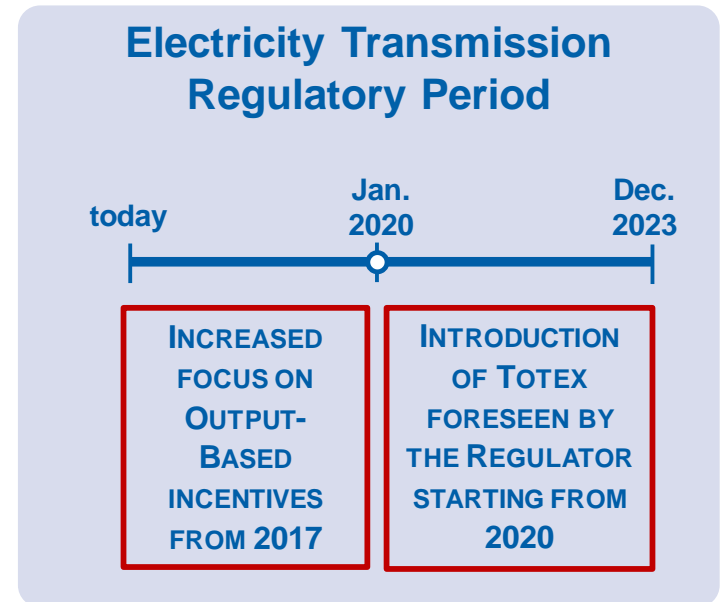
> RAB incentivized stable at ~40%



A Solid **+2%** RAB CAGR within the plan period

Accommodating the Transition - Regulation

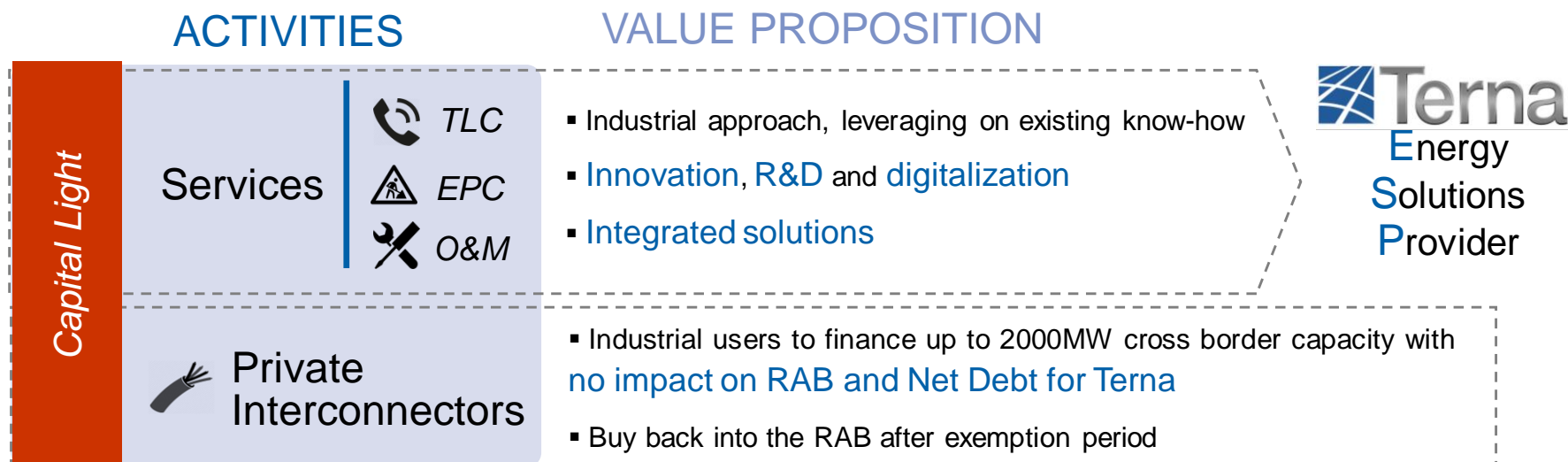
- **Allowed Return** (WACC) confirmed up to 2021 with potential upside on interim review (end 2018)
- **New Incentives** based on **outputs** for the system (i.e. capacity, quality of service)
- **Totex Regime**: potential outperformance vs outputs, targets and baseline (Opex+Capex)



A new **regulation** for an evolving **system**

Non Regulated Activities and International

> Exploiting our core capabilities and expanding regulated activities to generate incremental growth



EBITDA ~350€mn cumulated in 5 years
Average ~60% Margin
Old Plan ~50%



International

Limited capital allocation focused on Transmission

Key Assumptions – Regulated Business

Regulatory	<ul style="list-style-type: none">> 2017 Total Grid Fee* @ 1.91€bn> RAB growth driven by:<ul style="list-style-type: none">- <i>Capex (4€bn)</i>- <i>Inflation at 0.7% on average</i>> WACC at 5.3% also after 2019 interim review> Blended return at 6.3% (incentivized RAB at 40%)> Totex and Output-based: potential upsides not included> Inflation on allowed Opex at 0.5% on average
D&A	Extension to 45yrs in useful life of HV lines
Cost of Debt	Average 2017-2021 at 1.5%

Key Assumptions - Non Regulated & International

DOMESTIC NON REGULATED

KEY ASSUMPTIONS

Capital Light



EPC

- Interconnectors: + **850MW** cross border capacity
- RHV Grid **new opportunities**



O&M

- **HV lines/substations**
- **PV** initiatives



TLC

- Long Term contracts for **housing services**
- New opportunities from **Broadband** Italian initiatives

INTERNATIONAL

KEY ASSUMPTIONS

Capital Allocation



Brazil

- 2 BOOT concessions for >500km
- Capex at **~180€mn**
- P&L contribution starting from 2019



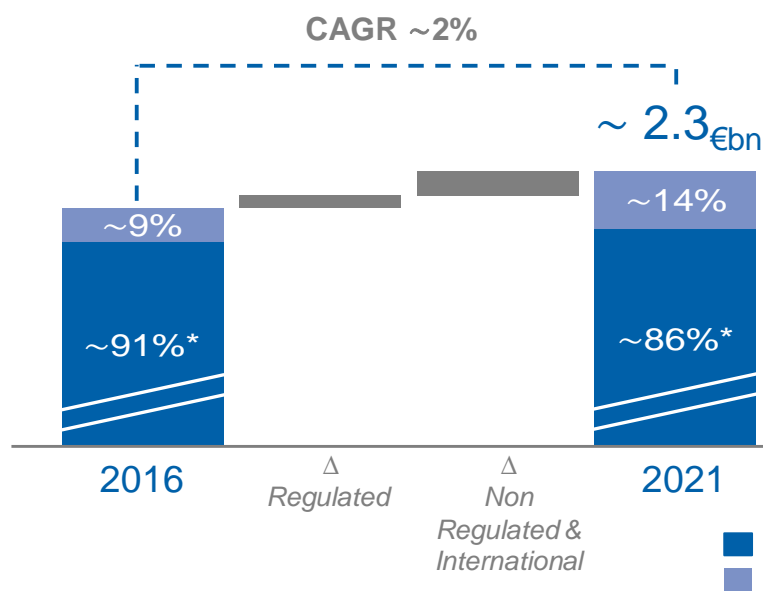
Uruguay

- BOT concession for >200km
- Capex at **~70€mn**
- P&L contribution starting from 2020 (on PBT)

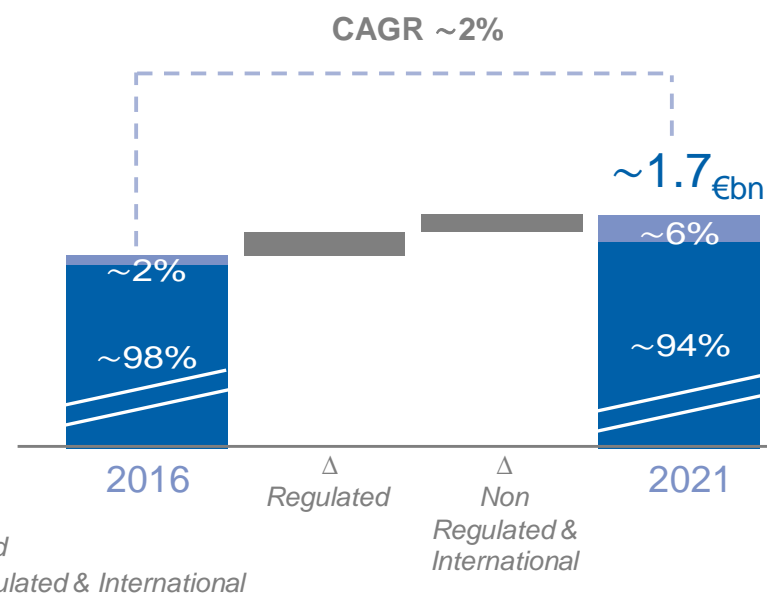
Group Targets – P&L

> Growth at Low Risk

REVENUES



EBITDA

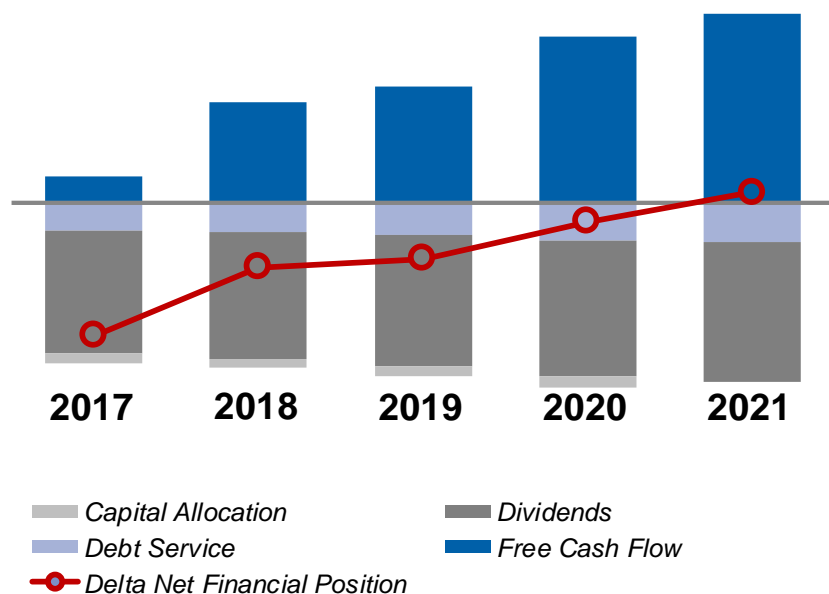


BOTTOM LINE

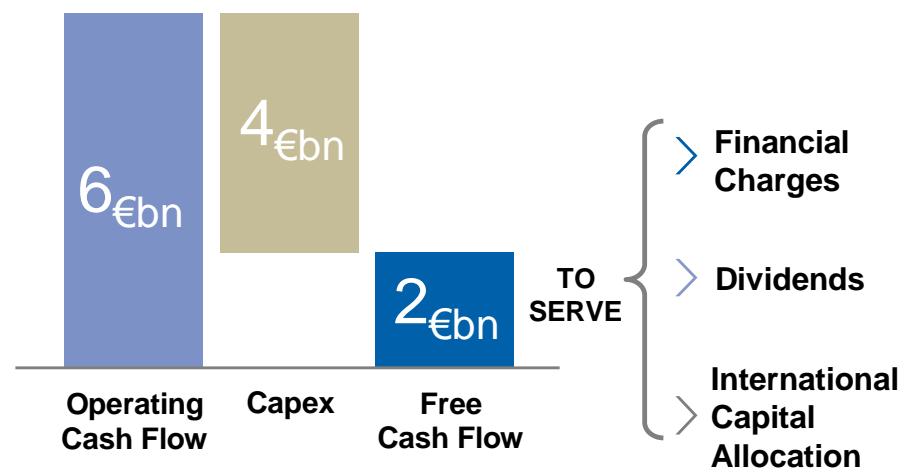
> EPS CAGR ~3% with increased visibility

Group Targets – Cash Flow

ANNUAL EVOLUTION



CUMULATED 2017-2021

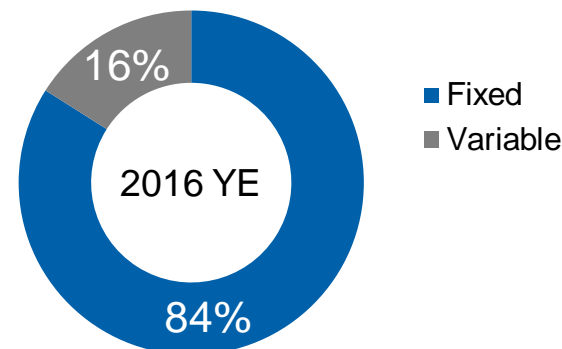


Group Targets – Net Debt

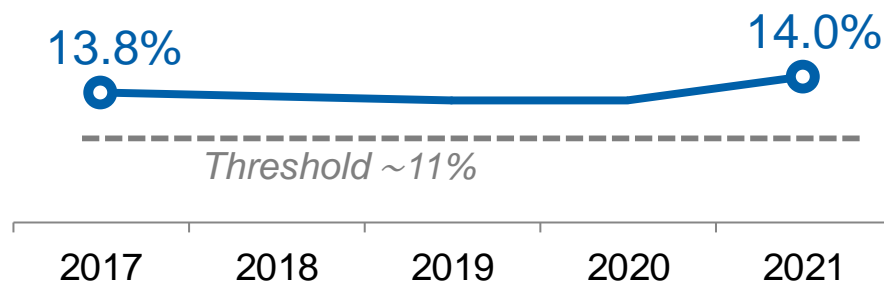
NET DEBT KEY FIGURES

- > Net Debt YE 2016 at 8€bn
- > Cost of Debt at 1.5% over the Plan
- > Net Debt / RAB <60% over the Plan

GROSS DEBT MIX



FFO/NET DEBT



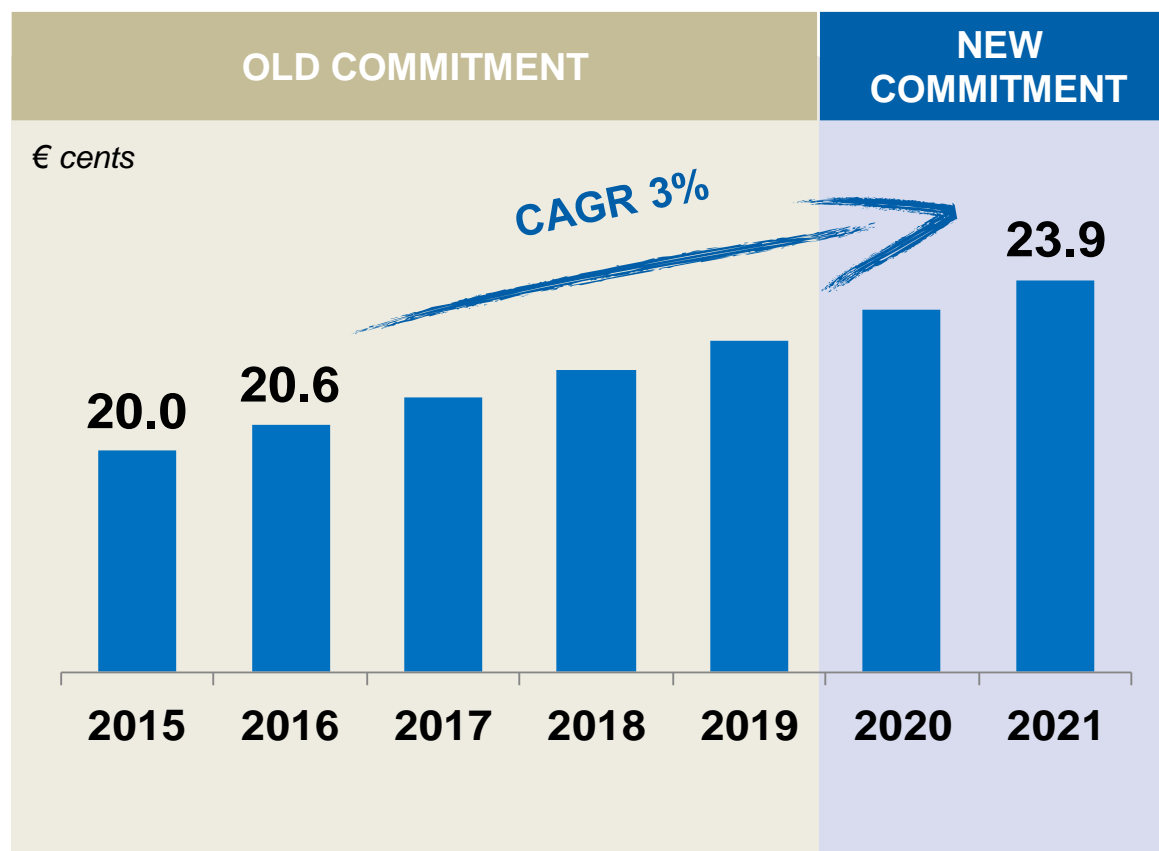
Rating ratios stable during the Period

Preliminary 2016 and Guidance 2017

	FY 2016		FY 2017
	Last Guidance	Preliminary ¹	Guidance
Revenues	~ 2.1 €bn	2.1 €bn	~ 2.25 €bn
EBITDA	~ 1.53 €bn	1.54 €bn	~ 1.58 €bn
Capex²	~ 0.9 €bn	0.9 €bn	~ 0.9 €bn
EPS	~ 29 €cents		~ 34 €cents

Reconfirming Dividend Policy

For an extended period



Consistent and Sustainable

Terna has a major role in the Energy Transition whilst remaining:

1

A very predictable business

- ⇒ *Focused on domestic regulated*
- ⇒ *Visibility of RAB and earnings*
- ⇒ *Capex needs supportive for LT growth*

2

Focused on Outperformances

- ⇒ *Debt management*
- ⇒ *Potential upsides from new reg. period*

3

Able to seize low risk opportunities
in Non Regulated and International (regulated)

4

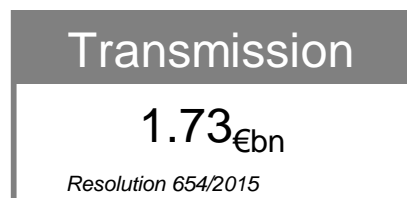
Committed on dividend growth
for an extended period

**A low risk
growing
investment
profile**

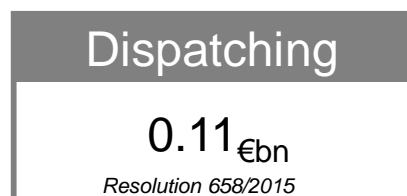
Annexes

2017 Total Grid Fee update*

2016



+



=

1.84 €bn

2017

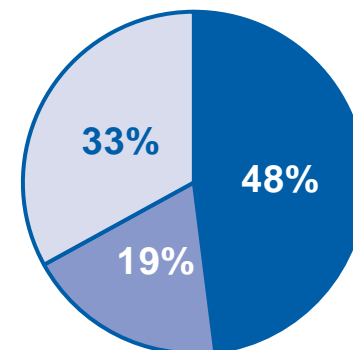
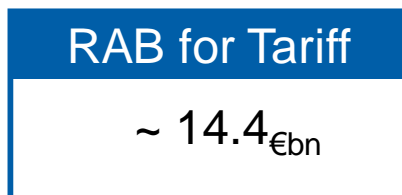


+



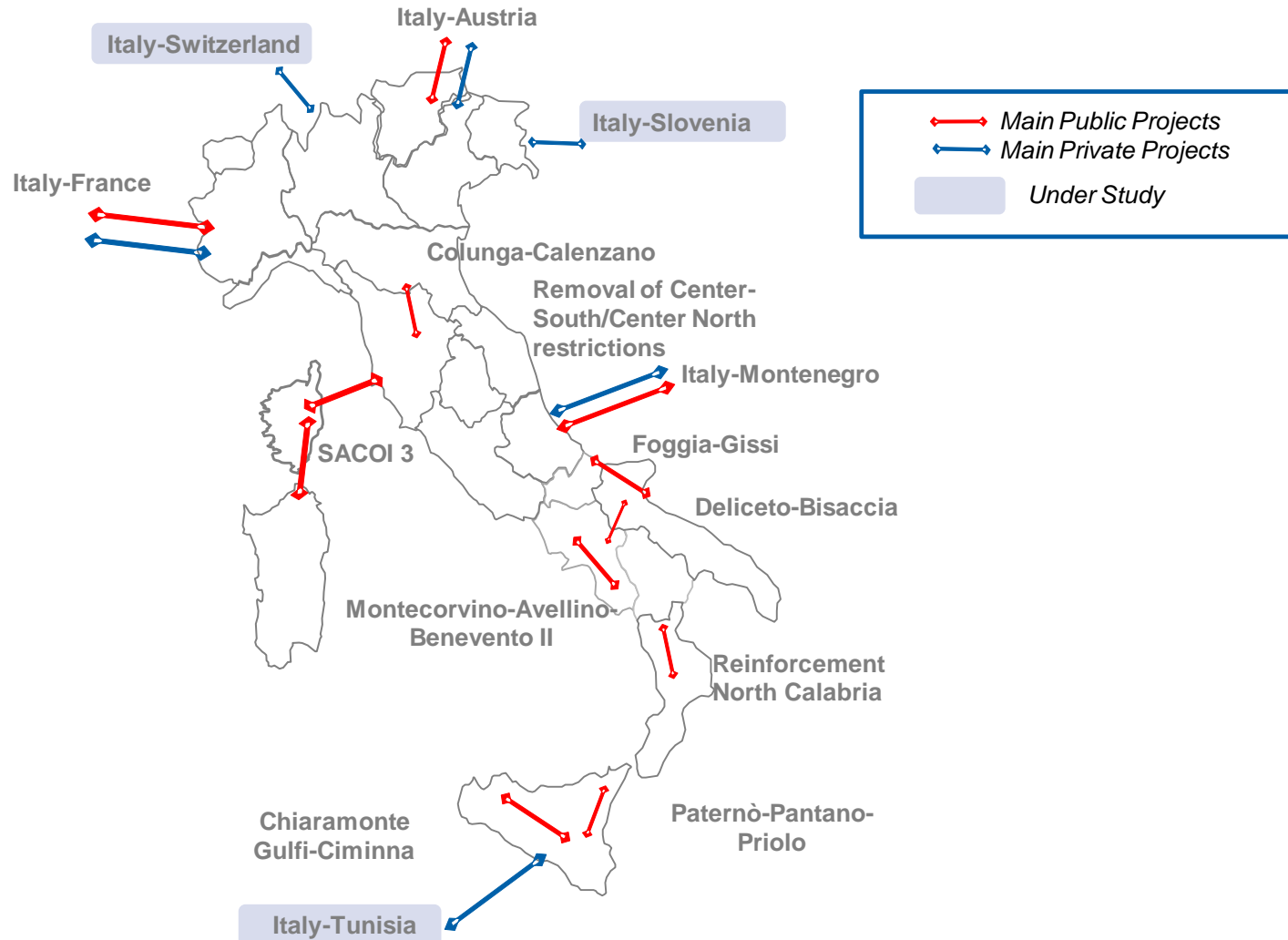
=

1.91 €bn



- RAB remuneration
- Allowed Opex
- Allowed D&A

Main Projects



New Cost Benefits Analysis

INVESTMENTS SELECTION FOR SYSTEM BENEFITS MAXIMISATION

- > New Cost Benefit Analysis (**CBA 2.0¹**) aligned with **ENTSO-E** criteria and methodology
- > To be applied to projects **>15_{€mn}²**
- > Introduction of **environmental and social** KPIs
- > Terna new **capex plan already compliant** with the new CBA 2.0 methodology

Main KPIs	CBA 1.0	CBA 2.0
Quality of service and security	●	●
Day-ahead market benefits	●	●
Renewables integration	●	●
Dispatching market benefits		●
Grid resilience and flexibility		●
Environmental and social KPI		●

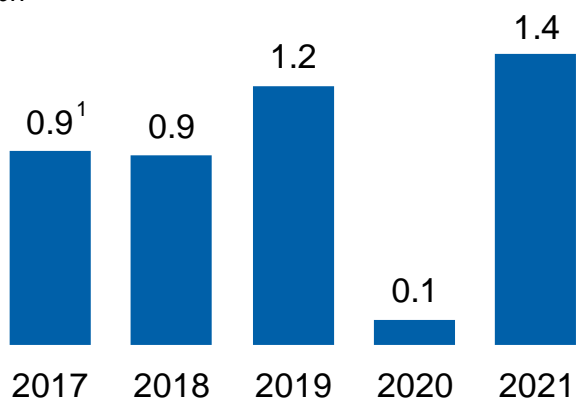
Summary Targets

Financial KPIs

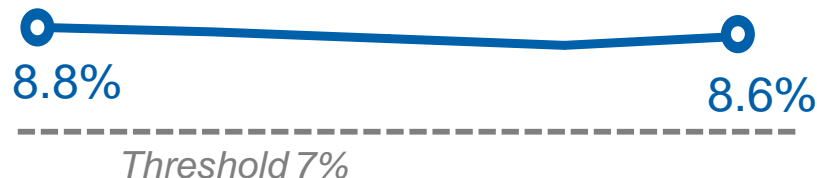
- Financial structure will remain **solid** within the plan
- Main Financial KPIs on a **sustainable level**, well below the main rating agency thresholds

MATURITIES

€bn



RCF/NET DEBT



GROSS INTEREST COVERAGE

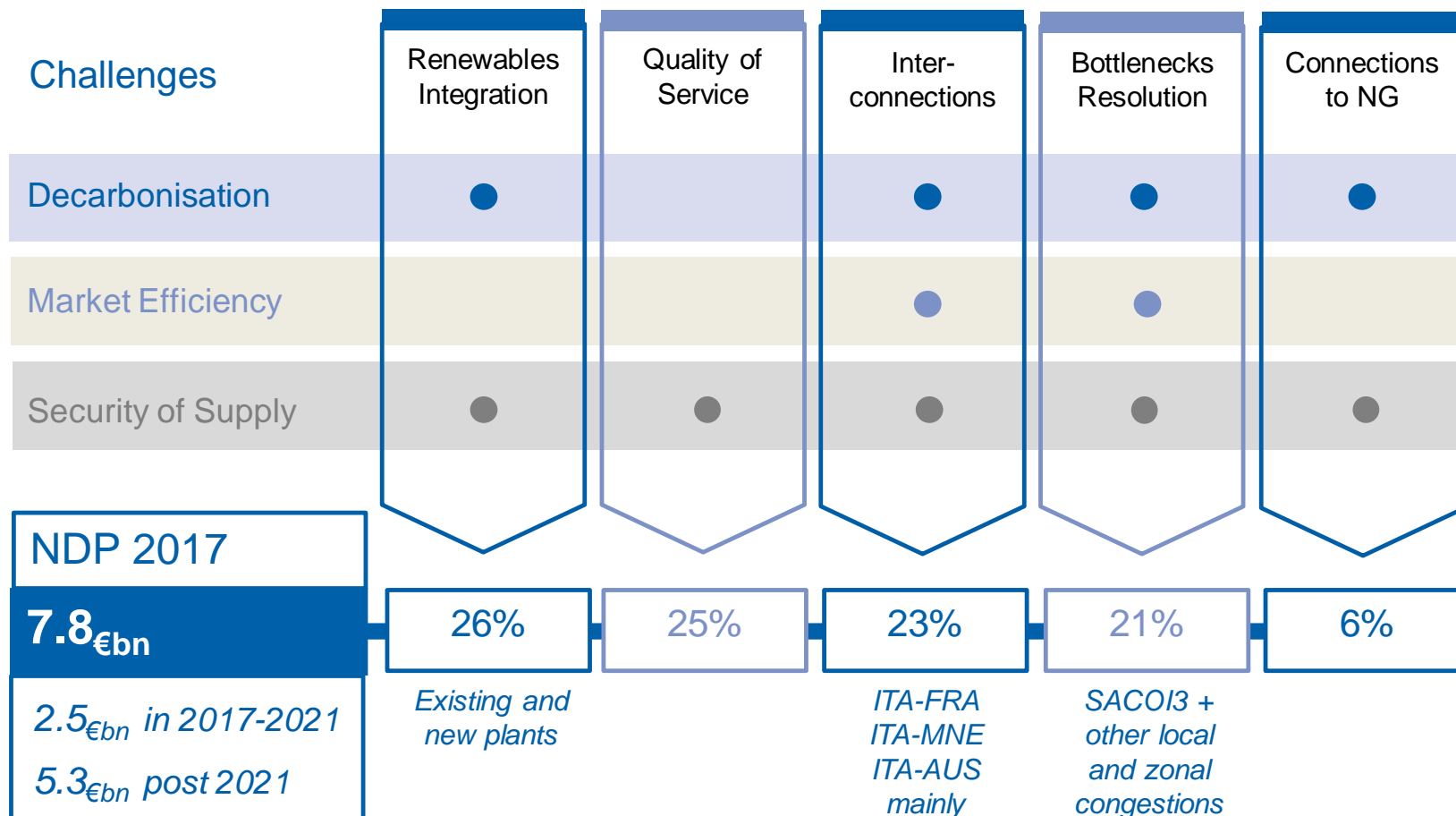


RATING

Rating	M/L Term		Delta	Outlook	
	Terna ²	Sovereign		Terna ²	Sovereign
S&P	BBB	BBB-	+1 notch	Stable	Stable
Moody's	Baa1	Baa2	+1 notch	Negative	Negative
Fitch	BBB+	BBB+		Stable	Negative

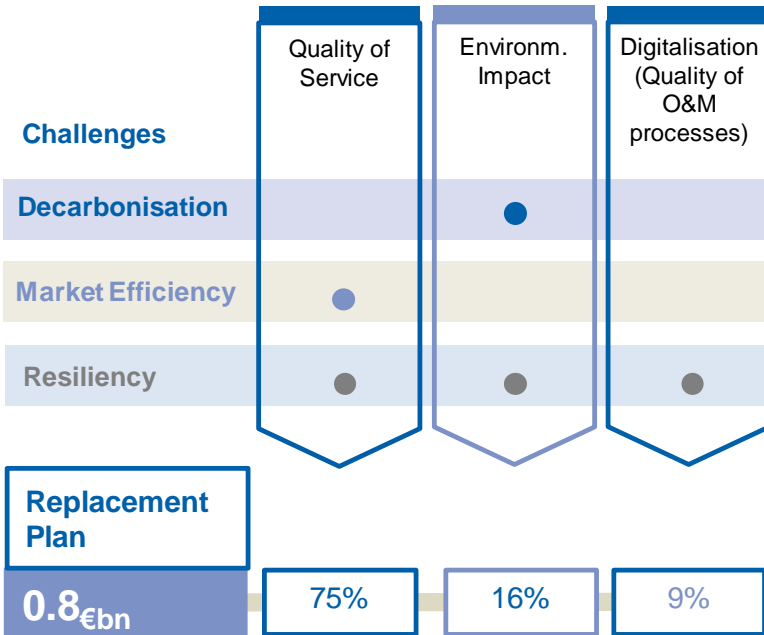
2017 National Development Plan

Benefits for the Electricity System (Categories)

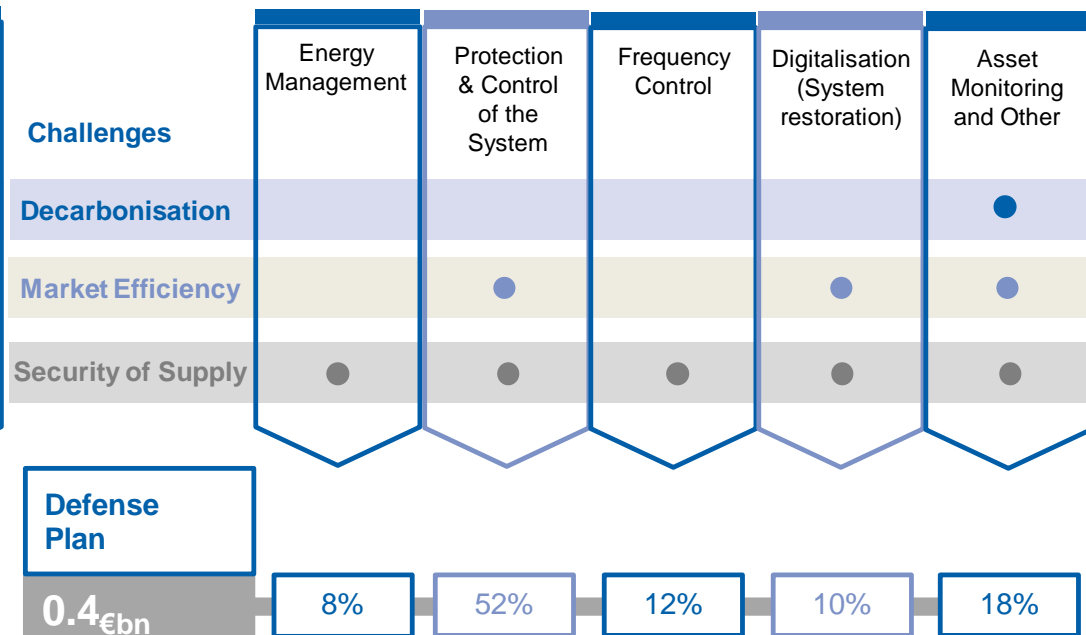


2017-2021 Replacement and Defense Capex Plan

Benefits for the Electricity System



Thematic Areas



Disclaimer

THIS DOCUMENT HAS BEEN PREPARED BY TERNA S.P.A. (THE "COMPANY") FOR THE SOLE PURPOSE DESCRIBED HEREIN. IN NO CASE MAY IT BE INTERPRETED AS AN OFFER OR INVITATION TO SELL OR PURCHASE ANY SECURITY ISSUED BY THE COMPANY OR ITS SUBSIDIARIES.

THE CONTENT OF THIS DOCUMENT HAS A MERELY INFORMATIVE AND PROVISIONAL NATURE AND THE STATEMENTS CONTAINED HEREIN HAVE NOT BEEN INDEPENDENTLY VERIFIED. NEITHER THE COMPANY NOR ANY OF ITS REPRESENTATIVES SHALL ACCEPT ANY LIABILITY WHATSOEVER (WHETHER IN NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY FROM THE USE OF THIS DOCUMENT OR ITS CONTENTS OR OTHERWISE ARISING IN CONNECTION WITH THIS DOCUMENT OR ANY MATERIAL DISCUSSED DURING THE PRESENTATION.

THIS DOCUMENT MAY NOT BE REPRODUCED OR REDISTRIBUTED, IN WHOLE OR IN PART, TO ANY OTHER PERSON. THE INFORMATION CONTAINED HEREIN AND OTHER MATERIAL DISCUSSED AT THE CONFERENCE CALL MAY INCLUDE FORWARD-LOOKING STATEMENTS THAT ARE NOT HISTORICAL FACTS, INCLUDING STATEMENTS ABOUT THE COMPANY'S BELIEFS AND EXPECTATIONS. THESE STATEMENTS ARE BASED ON CURRENT PLANS, ESTIMATES, PROJECTIONS AND PROJECTS, AND CANNOT BE INTERPRETED AS A PROMISE OR GUARANTEE OF WHATSOEVER NATURE.

HOWEVER, FORWARD-LOOKING STATEMENTS INVOLVE INHERENT RISKS AND UNCERTAINTIES AND ARE CURRENT ONLY AT THE DATE THEY ARE MADE. WE CAUTION YOU THAT A NUMBER OF FACTORS COULD CAUSE THE COMPANY'S ACTUAL RESULTS AND PROVISIONS TO DIFFER MATERIALLY FROM THOSE CONTAINED IN ANY FORWARD-LOOKING STATEMENT. SUCH FACTORS INCLUDE, BUT ARE NOT LIMITED TO: TRENDS IN COMPANY'S BUSINESS, ITS ABILITY TO IMPLEMENT COST-CUTTING PLANS, CHANGES IN THE REGULATORY ENVIRONMENT, DIFFERENT INTERPRETATION OF THE LAW AND REGULATION, ITS ABILITY TO SUCCESSFULLY DIVERSIFY AND THE EXPECTED LEVEL OF FUTURE CAPITAL EXPENDITURES. THEREFORE, YOU SHOULD NOT PLACE UNDUE RELIANCE ON SUCH FORWARD-LOOKING STATEMENTS. TERNA DOES NOT UNDERTAKE ANY OBLIGATION TO UPDATE FORWARD-LOOKING STATEMENTS TO REFLECT ANY CHANGES IN TERNA'S EXPECTATIONS WITH REGARD THERETO OR ANY CHANGES IN EVENTS.

EXECUTIVE IN CHARGE OF THE PREPARATION OF ACCOUNTING DOCUMENTS "TIZIANO CECCARANI" DECLARES, PURSUANT TO PARAGRAPH 2 OF ARTICLE 154-BIS OF THE CONSOLIDATED LAW ON FINANCE, THAT THE ACCOUNTING INFORMATION CONTAINED IN THIS PRESENTATION, FOR WHAT CONCERNS THE ACTUAL FIGURES, CORRESPONDS TO THE DOCUMENT RESULTS, BOOKS AND ACCOUNTING RECORDS.

THE SORGENTE-RIZZICONI PROJECT INTERCONNECTION IS CO-FINANCED BY THE EUROPEAN UNION'S EUROPEAN ENERGY PROGRAMME FOR RECOVERY PROGRAMME. THE SOLE RESPONSIBILITY OF THIS PUBLICATION LIES WITH THE AUTHOR. THE EUROPEAN UNION IS NO RESPONSIBLE FOR ANY USE THAT MAY BE MADE OF THE INFORMATION CONTAINED THEREIN.

investor.relations@terna.it

+39 06 8313 9041

www.terna.it

