




# PPC's medium-term strategic priorities and financial outlook for 2020


16th December 2019




# Energy Transition: To accelerate decarbonization, EU is revisiting its climate targets

## Several countries have set as target to be carbon neutral by 2050

 Carbon neutral by 2050

 Carbon neutral by 2035

 Carbon neutral by 2050

## While other countries have also set intermediate targets

 **55%**  
by 2030

 **40%**  
by 2020

 **70%**  
by 2030

 **40%**  
by 2030

Carbon neutral by 2050

Carbon neutral by 2045

## Greece is committing to ambitious climate targets

*“-55% vs. 2005 by 2030 – transition to a climate neutral economy by 2050 contributing proportionally to EUs objective”*

National Energy Plan, Nov 2019

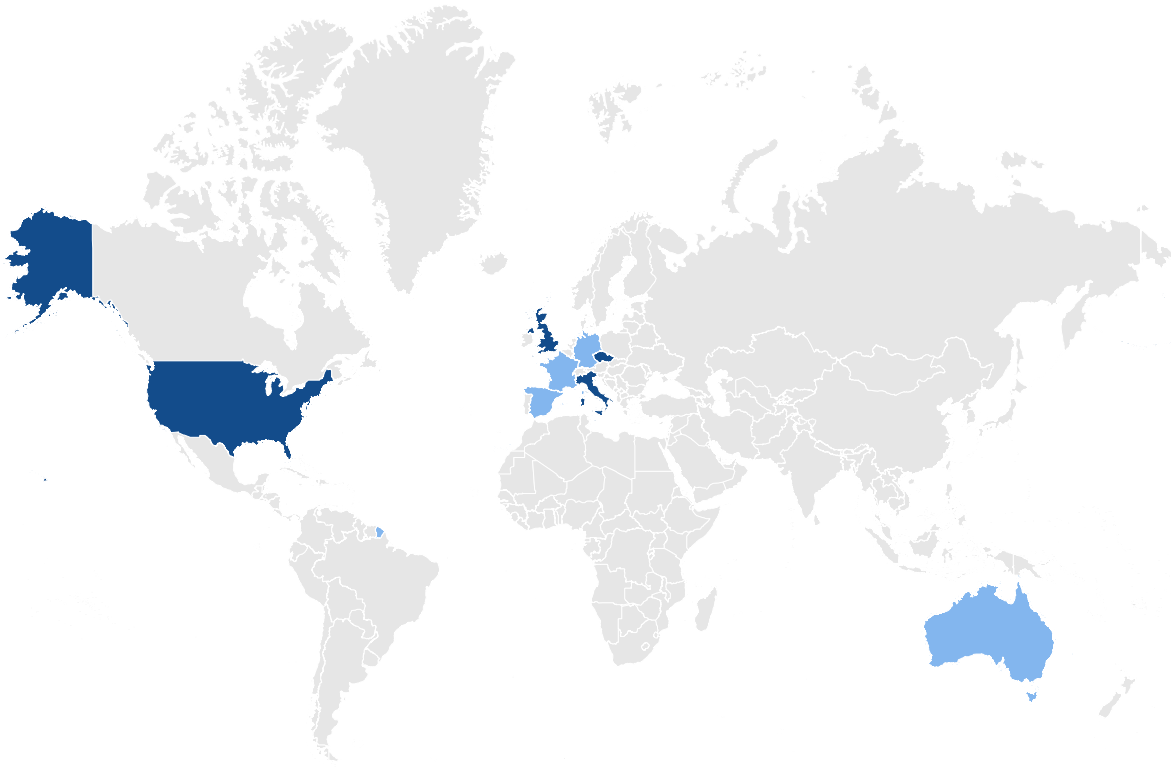
## EU’s Green Deal is heading towards the same direction

*“Emissions to be halved by 2030 and reach net-zero carbon by 2050”*

European Green Deal, Dec 2019

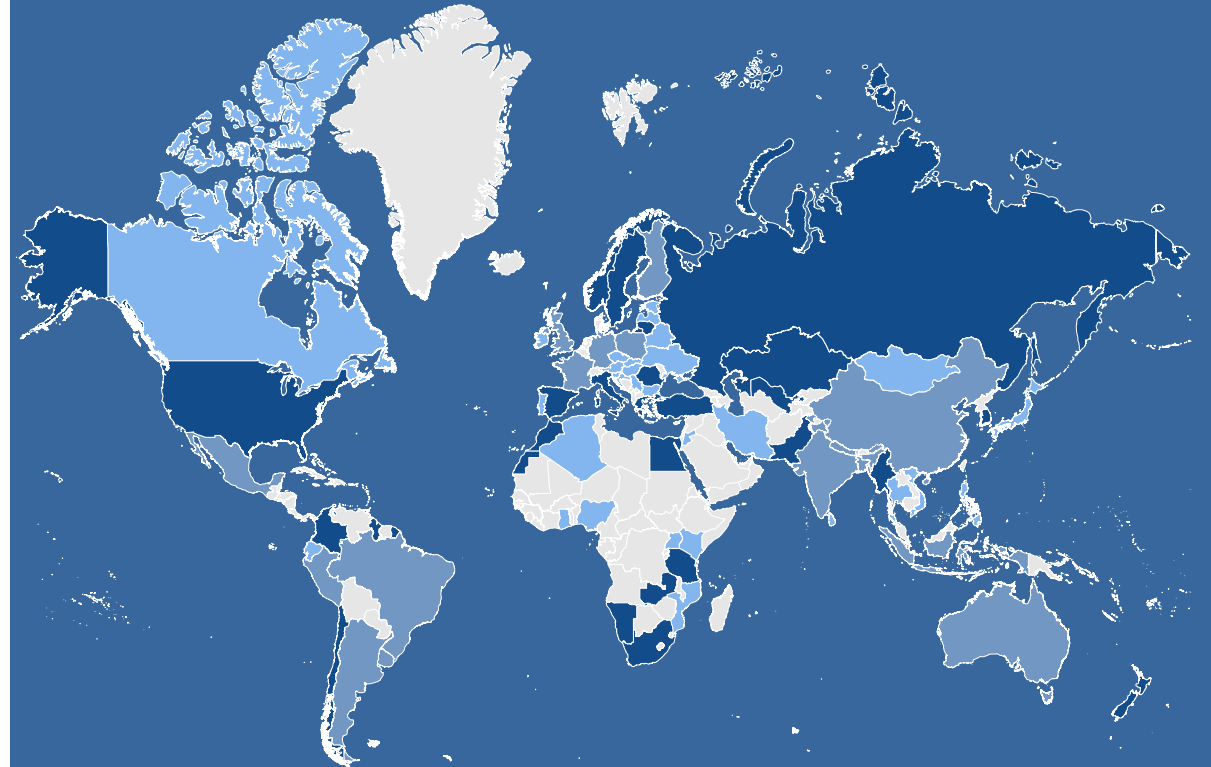
# In parallel, decreasing LCOEs and government incentives are pushing investments in renewables

Few policy support schemes existed in 2000



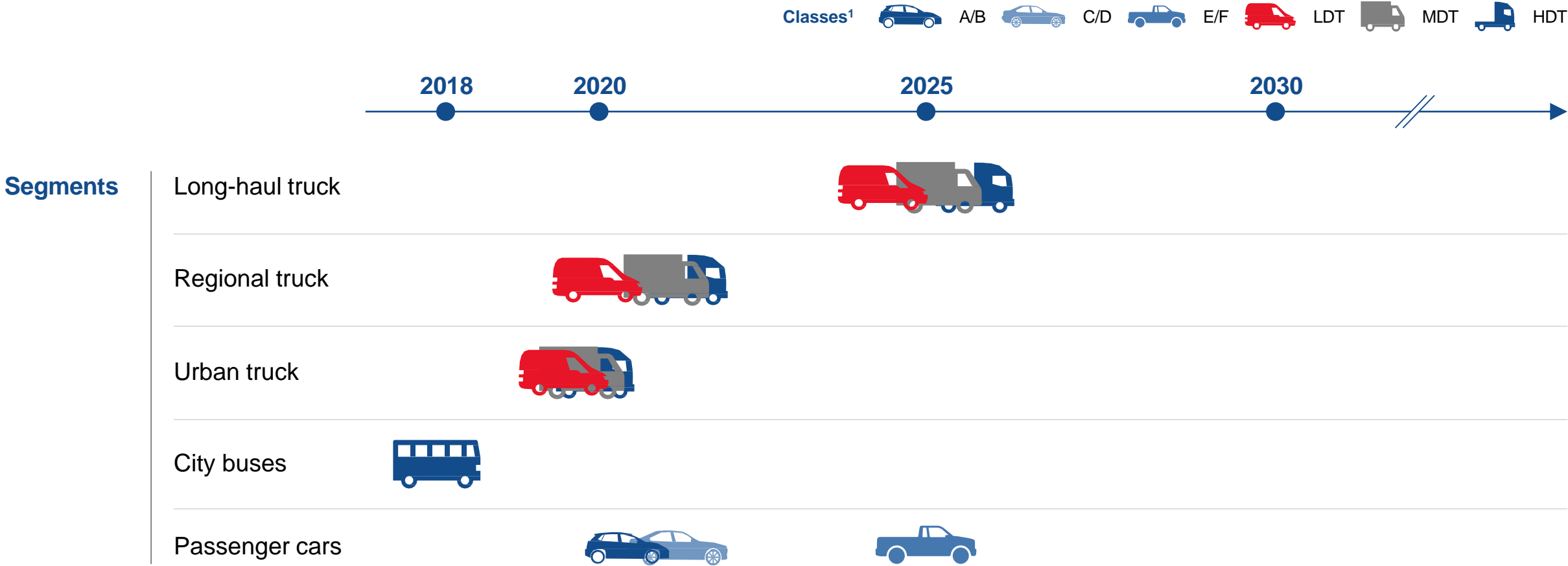
- Feed-in tariff/premiums
- Mixed
- Market-based mechanisms

By 2016, most countries had something in place



# Ramp-up of EVs at scale as cost-parity to ICE is achieved

Timing of cost-parity of electric vehicles with fuel vehicles, based on Total Cost of Ownership (TCO) in the EU



<sup>1</sup> 1 Class definitions in EU is defined in weight for trucks (Heavy duty transport (HDT) >16t, Medium duty transport (MDT): 7.5-16t, Light duty transport (LDT): 3.5-7.5t) and in size/ICE price for passenger cars: (A/B < 4 m and below 20k CHF, C/D:4-5 m, 28-55k CHF, E/F > 4.5 m, >50k CHF)

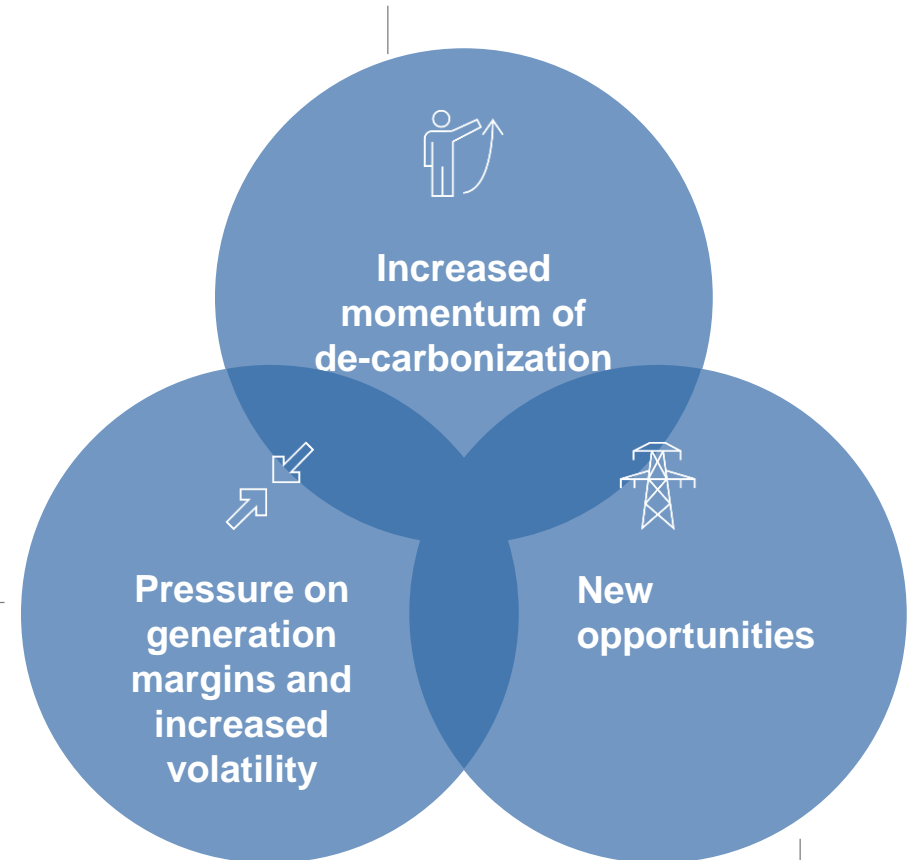
# Energy Transition

The utilities landscape and the role of traditional utilities is rapidly changing

Power generation in the EU shifting away from coal/lignite due to increased CO2 prices and increased penetration of more competitive RES

EU Power sector lost **€50bn** of profitability in the last 8 years

Value shift from **conventional generation** to **RES, Grids** new Retail products



Scale-up of **RES** adoption

Ramp-up of **EVs** at scale

Convergence of all services to **smart homes**

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**In the last 4 months, we have set the foundations for a holistic transformation**

## Changes in PPC and the market the last 4 months...

Abolition of NOME auctions

PPC modernization law  
(4643/2019)

Revised PPC retail pricing

New PPC retail products (gas)

National Energy & Climate Plan

New PPC Business plan



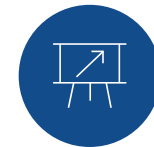
...already yielding results

**>€100<sub>mn</sub>**

EBITDA uplift in 2019

**€200<sub>mn</sub>**

PSO payment confirmed for 2020



Removal of Auditors emphasis on  
“going concern material uncertainty”

Credit rating upgrade  
(S&P from CCC+ to B-)

# PPC is re-inventing itself through three pillars that will drive performance improvement



Transforming PPC into a financially and environmentally sustainable, modern utility

**A “Green-deal” in Generation**  
Accelerated Lignite phase-out  
Focus on RES

**B Digitalization and Operational Efficiency**  
New technology in Grids (Smart meters, Automatic switchers, GIS / Scada systems)  
Operational excellence

**C Customer Centricity**  
Reposition Retail  
New products  
Competitive tariffs  
  
E- Mobility

Turning towards the global Energy Transition

... resulting in a shift in generation mix and a more balanced position by 2024

~€1<sub>bn</sub>  
EBITDA

~11.5<sub>K</sub>  
FTEs

>1<sub>GW</sub>  
in new RES capacity

Healthy profitability and sustainable debt

# Our vision's three core pillars translate into specific initiatives for each Business unit

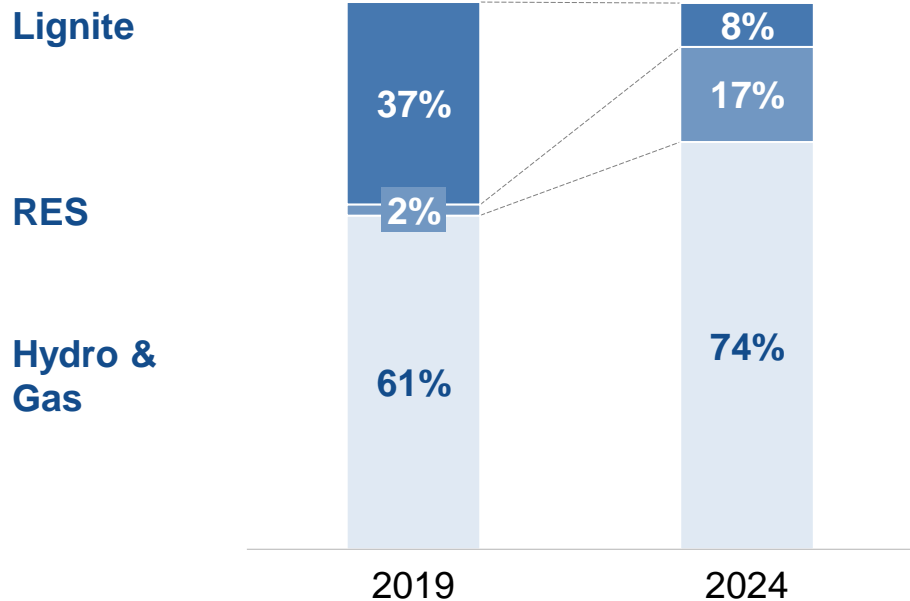
		<b>A “Green-deal” in Generation</b>	<b>B Digitalization and Operational Efficiency</b>	<b>C Customer Centricity</b>
<b>1</b>	<b>Conventional generation</b>	<ul style="list-style-type: none"> <li>Phase-out existing lignite plants by 2023, and phase-out in whole lignite by 2028</li> </ul>	<ul style="list-style-type: none"> <li>Improve operational efficiency of remaining plants and mines</li> </ul>	
<b>2</b>	<b>RES</b>	<ul style="list-style-type: none"> <li>Ramp-up PPCR and scale up RES capacity</li> </ul>	<ul style="list-style-type: none"> <li>Systems for production prediction, and RES participation in the Power Markets</li> </ul>	
<b>3</b>	<b>Retail &amp; new downstream</b>		<ul style="list-style-type: none"> <li>Extract value from stock of unpaid bills</li> </ul>	<ul style="list-style-type: none"> <li>Revisit go-to-market focused on service and profitability</li> <li>Introduce new products incl. gas, energy services</li> </ul>
<b>4</b>	<b>Distribution</b>		<ul style="list-style-type: none"> <li>Enhance network investments</li> <li>Introduce digital in grid control</li> </ul>	
<b>5</b>	<b>Other</b>		<ul style="list-style-type: none"> <li>Monetize PPC’s real estate</li> <li>Costs rationalization</li> </ul>	<ul style="list-style-type: none"> <li>Develop the infrastructure for e-mobility</li> </ul>



# 1/ We are winding down our lignite assets to drive economic performance in an environmentally sustainable manner

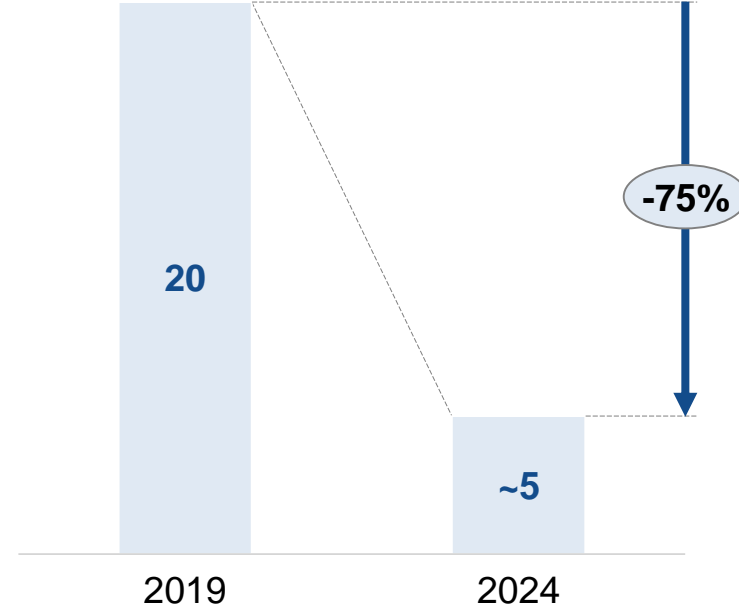
PPC capacity mix<sup>1</sup>, %

From... To...



PPC CO<sub>2</sub> emissions<sup>2</sup>, mn tons

From... To...



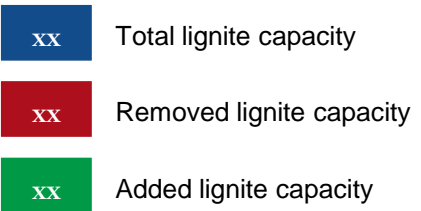
Over the next 5 years, PPC will:

- Re-configure its **generation fleet** by gradually **decommissioning lignite assets**
- Capture operational efficiencies in the remaining units

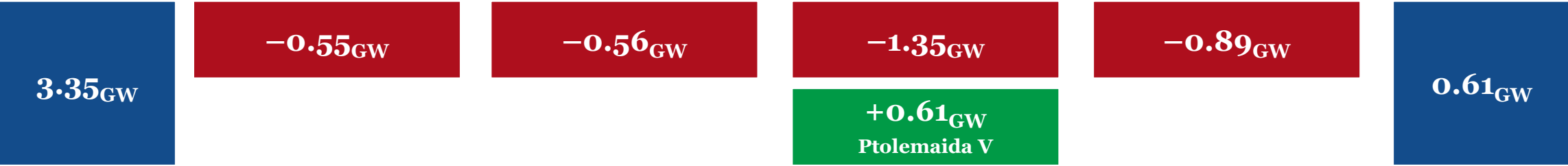
<sup>1</sup> Calculated as capacity per source over total capacity of PPC

<sup>2</sup> CO<sub>2</sub> emissions outlook is for the interconnect system; for the total system, CO<sub>2</sub> emissions are 23.5mn tons for 2019 and 7.5mn tons for 2024

# 1/ PPC will decommission ~3.4 GW of lignite assets by end of 2023 in line with the National Energy & Climate plan, to support the country's energy needs

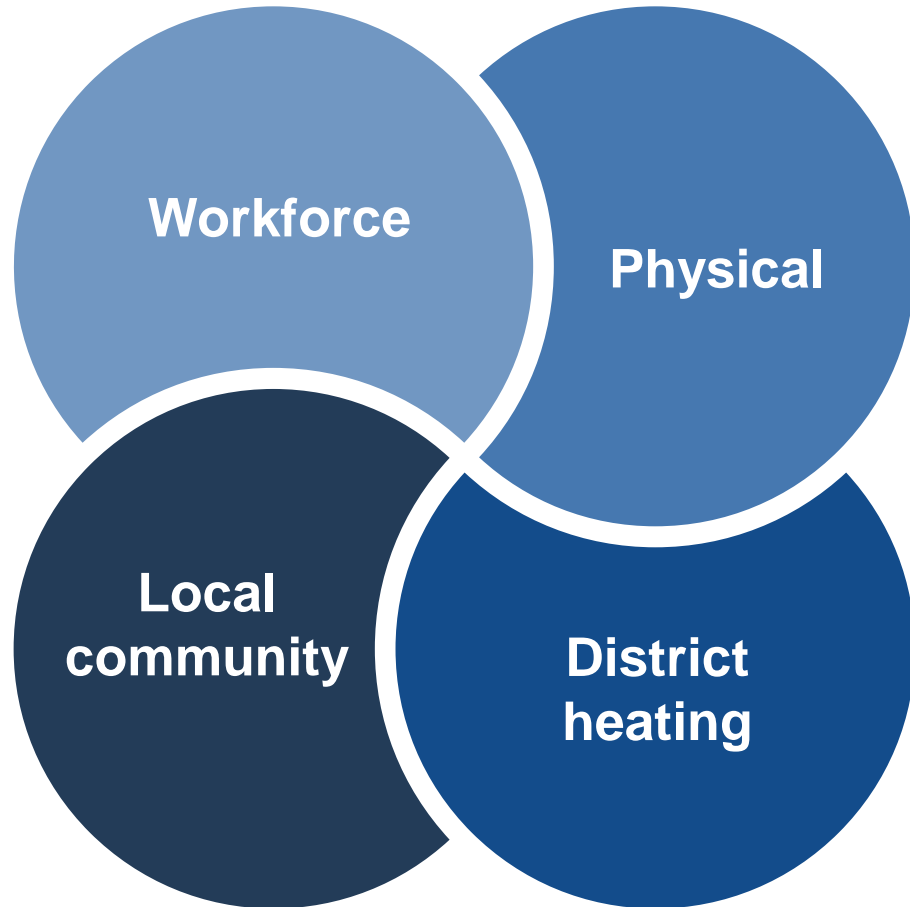


NET CAPACITY



To phase out lignite by 2028 & continue operation on different fuel

# 1/ We are taking a holistic approach to the decommissioning of lignite assets



## Workforce

- **Repositioning** and **reskilling** of workforce
  - Fair retirement / exit schemes (VRS/VES) self-financed by PPC
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## Physical

- Responsible **environmental restoration** and safe **handling of hazardous materials**
  - **Value extraction options** for PPC's assets including land, buildings, equipment and inventory
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## District heating

- Working with local communities to find **alternative solutions** including new gas delivery models before unit decommissioning
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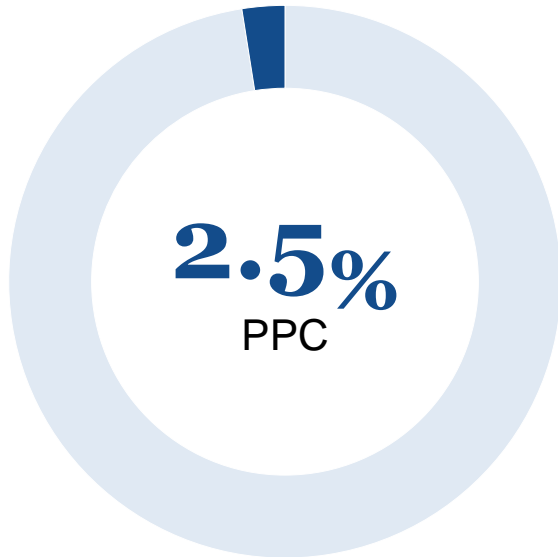
## Local community

- Introduce **new investments** in the local community e.g., PVs
- Fully supporting the **government's master plan** to counterbalance the impact of the decommissioning to the affected communities

## 2/ We are redeploying our capital towards RES to shift our generation towards sustainable sources and stable profitability while supporting the country's energy needs

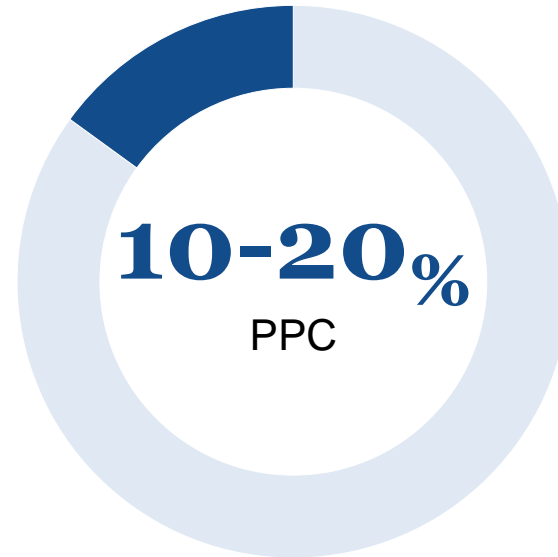
### From...

PPC's 2019 market share in RES capacity



### To...

PPC's 2024 market share in RES capacity



**>1 GW**  
in new RES capacity

**>6 GW**  
PPC project pipeline



**New**  
**partnerships**  
to accelerate scale up

# 3/ The new PPC Retail will drive performance by focusing on four major areas



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## Go-to-market strategy

Revamp the **go-to market strategy** to modernize the brand and re-think customer targeting to focus on high value customers



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## New products

Increase customer loyalty and reduce churn by **introducing new products** (e.g., double play gas, energy services)



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## Digital & Analytics

**Launch modern digital channels and customer journeys** to increase efficiency and improve customer experience



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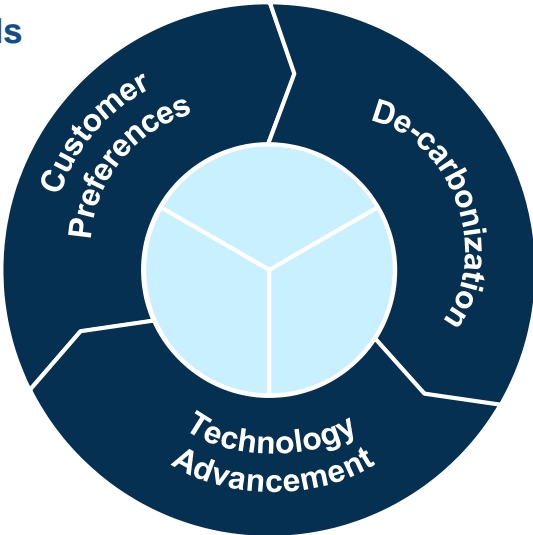
## Collections

**Set-up in-house collections** function with recovery strategy and targets (including segmentation, systems, settlements, performance monitoring)  
Involve specialized partners

# 4/ We are expanding our grid, through new investments and technologies, such as smart meters to address key trends in the DSO space

## Key trend affecting DSOs...

Increased penetration of **distributed generation** (RES)  
Emergence of **micro grids**



Advanced analytics/predictive maintenance  
Digitization of hardware/grid  
Automation

**Policy targets** on GHG emission rates reduction  
**Electrification** of heat, mobility and industry energy consumption



## ...translated into investments

### Smart grid

Advanced Metering Infrastructure  
Distribution automation (FDIR – fault detection isolation and restoration)  
GIS/Scada Systems

### Grid edge (Beyond the meter)

Distributed generation integration  
Demand response systems  
Micro-grids

### Advanced analytics

Asset management analytics  
System analytics (e.g. load forecasting for RES)

# 5/ We will drive adoption of Electric Vehicles (EV) by leading investment in this space

## Customer preference is shifting to e-mobility

Consideration

**64%**

Of customers in Germany consider BEV / PHEV vehicles for their next car purchase, with the same number being 86% in China and 51% in the US

Infrastructure and range

**50%**

Of potential BEV buyers are concerned about access to charging stations or limited range

Repurchase

**>9/10**

Current BEV owners consider BEV's for their next car purchase

Supply

**~770K**

Unit backlog for Tesla models as of 2019

**>1k charging points to be created in Greece the next 2-3 years**

**Mid-term target potential for ~10k charging stations in the country**

# There are 3 enablers to reinvent the way PPC works and bring us at par with modern utilities and industrial companies

## Digital

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Leverage Digital and Advanced Analytics across all functions to increase efficiency, draw insights for decision making and drive employee and customer experience

## HR

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Refine HR & performance management framework to develop our internal workforce, and attract new talent

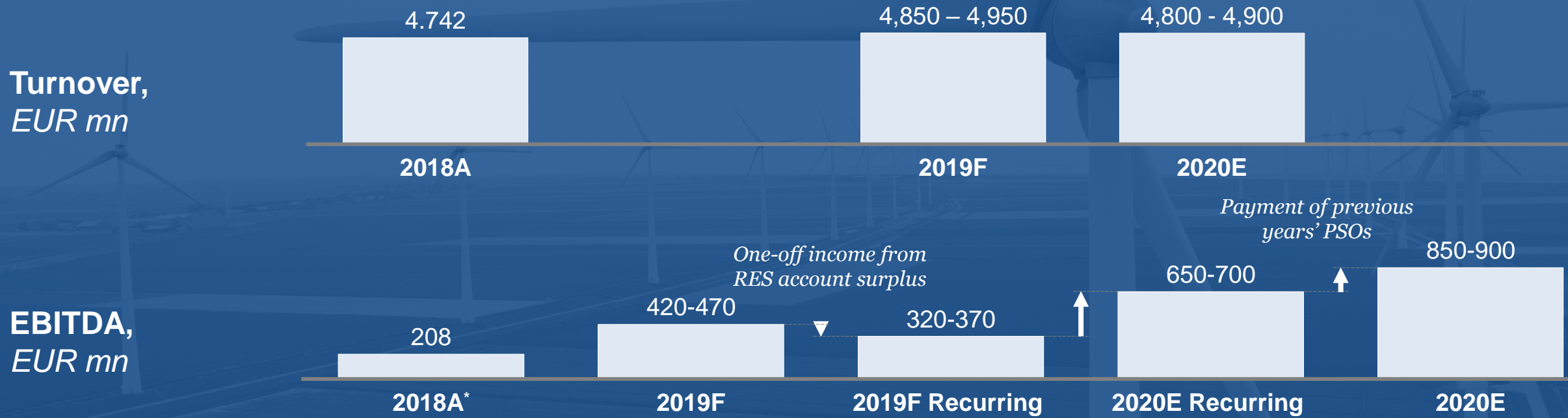
## Governance

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Adjust organizational structure, BoD and executive governance and key processes (incl. strategic planning, budgeting, procurement) in line with international best practices



# We expect stronger performance in 2020, reaching EBITDA of EUR ~850 mn



**Positive contribution**

- Tariff adjustments (Q4 2019)
- Reduction in OpEx (payroll and other)

**Negative contribution**

- Reduction of market share
- Higher energy balance cost

**Positive contribution**

- Tariff adjustments
- Reduction in OpEx (payroll)
- Lower energy balance cost
- Abolition of NOME

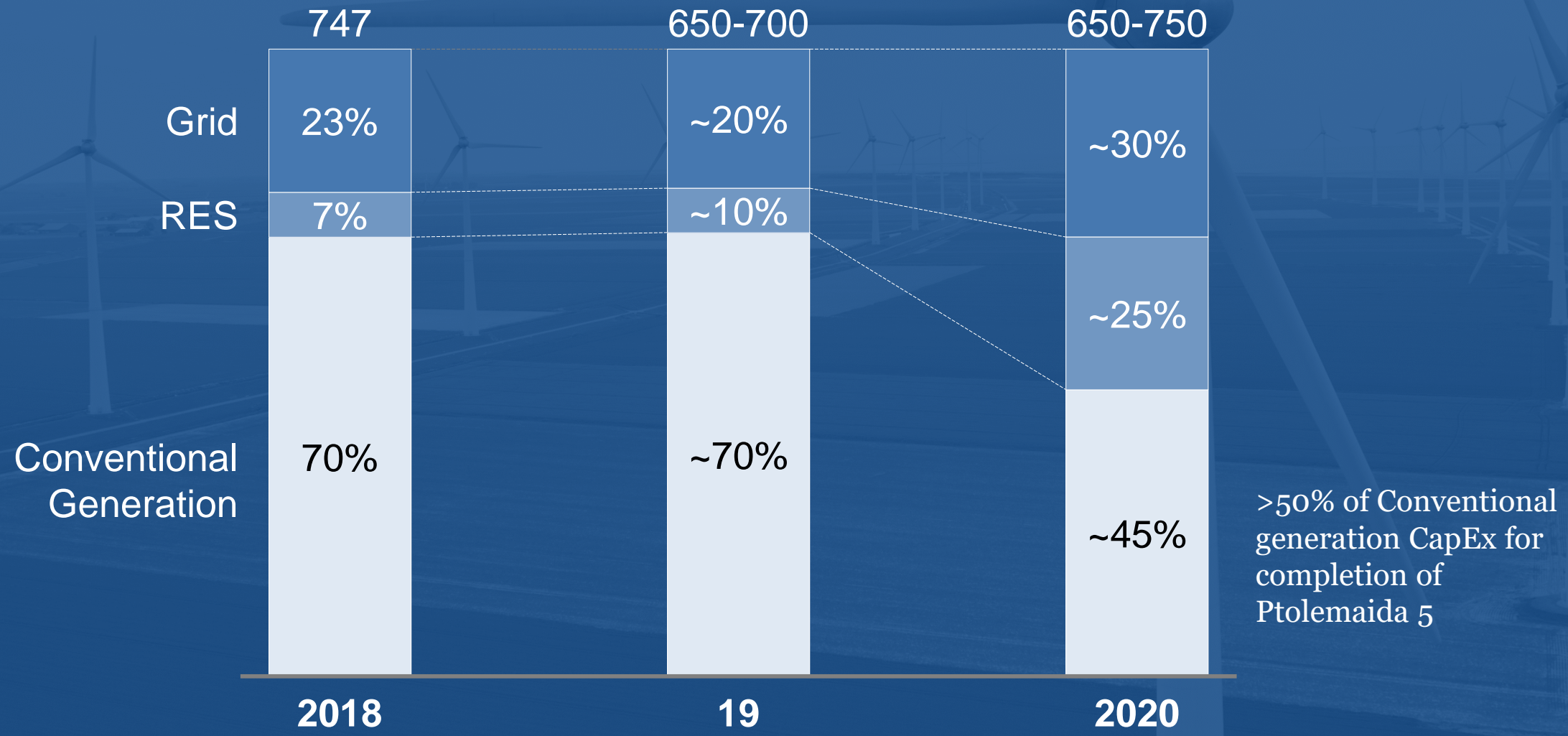
**Negative contribution**

- Reduction of market share

\* adjusted for personnel severance payment of € 164.3 m. and settlement of the renewables levy (ETMEAR) for previous years of € 105.2 m

# 2020 CapEx remains at the same levels as 2019; focus shifting to RES and grids

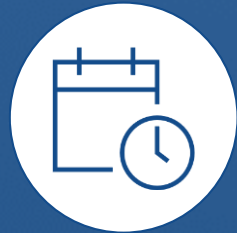
EUR mn



# What to expect next



**Finalize PPC's Business plan**



**Hold investor and analyst  
day (Q1 2020)**