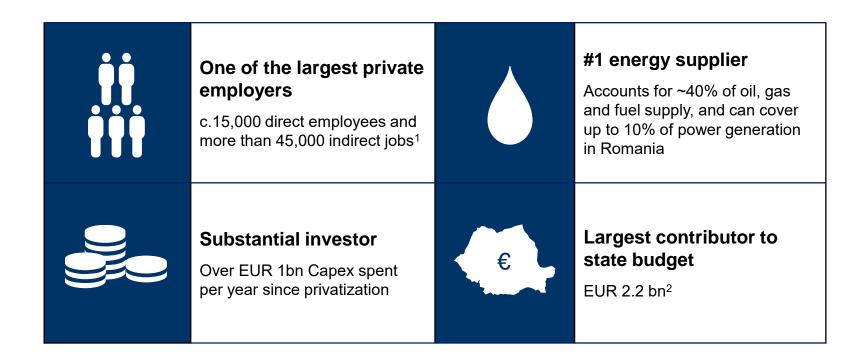




# We are the leading industrial company in Romania



All data refers to 2016



<sup>&</sup>lt;sup>1</sup> Source: internal data and analysis; <sup>2</sup> Includes: profit tax, royalties, employer social contributions, excises incl. custom duties, VAT, employee related taxes, other direct and indirect taxes paid to Romanian State

## Operating in the integrated oil and gas sector



### **Upstream**

#### Romania



- 3.60 mn toe/yr crude oil and NGL
- 5.25 bcm/yr gas
- 582 mn boe proven reserves (~10 yrs of current production)

#### Kazakhstan



- 0.36 mn toe/yr crude oil and NGL
- 0.05 bcm/yr gas
- 24 mn boe proven reserves



### **Downstream Oil**

Petrobrazi refinery, 4.5 mn t/yr capacity



- 783 filling stations, operated via 2 brands: Petrom (479, Romania, Moldova) and OMV (304, Romania, Bulgaria, Serbia)
- 2.6 mn t retail sales



### **Downstream Gas**

- Gas sales 4.6 bcm/yr, meeting up to ~40% of Romania's demand
- Brazi gas-fired power plant (860 MW)

All data refers to 2016



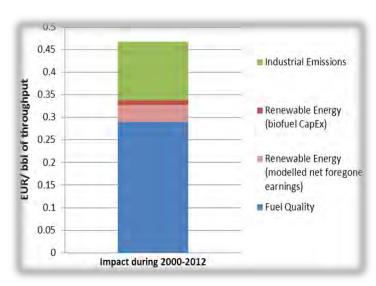
# The competitiveness of EU refiners is under pressure from non-EU refiners and high costs of regulation

- Refiners operate in a global market; intense competition from large scale non-EU refineries (India, China, Middle East)
- Regulatory framework incurs additional costs for energy and compliance that hamper competitiveness
- ► ETS Phase IV to maintain appropriate level of protection for EU installations and prevent "carbon leakage"

Policies post 2020 should converge to deliver a level playing field for the European industry to thrive.

Total cost impact of EU Directives (not including indirect demand effects)

47\* eurocents/bb



\*Data available from the Refining Fitness Check

## Romanian refining landscape: key figures

#### **OVERCAPACITY**

**SHUT DOWNS** over the last few years: based on low competitiveness, debts and site inefficiencies

### Among LOWEST LEVELS OF CAR OWNERSHIP in Europe

- ▶ 3 major refineries: Petromidia (KMG International), Petrobrazi (OMV Petrom) and Petrotel Lukoil
- ▶ 1/3 crude from domestic production
- ▶ 2014: **11.66 mn t crude** to produce **5.17mn t** diesel, **3.06mn t** gasoline & others
- ▶ 2016: >5.15 million light-duty vehicles registered: 3.2mn gasoline, 1.9mn diesel & 60,000 LPG
- Aging vehicles:
  - 270 cars/1000 people trend indicates a rapid increase of used imported vehicles
  - Share of Diesel vehicles is on an upward trend
  - Hybrid and EVs have a negligible growth, despite subsidies
- ▶ By **2030** there is a projected increase to 356 vehicles/1000 people
- ► Fuel consumption growth 6% by **2030** as a result of improvements on ICEs' efficiency growth entirely covered by alternative fuels (mainly biofuels and LPG)



# The transition to a low emissions mobility must maintain full benefits for consumers

- ▶ Oil products will cover 90% of the EU transport needs by 2030 and 86% by 2050\*
- Mobility of businesses and consumers is prerequisite for economic growth, a key contributor to GDP and sustains quality of life
- Policies must reconcile the reduction of GHG emissions with ensuring the best value for money for consumers
- Avoid technological mandates and allow for most sustainable sources of bioenergy to reach maturity



#### No zero-emission mobility yet

- ► Consider the full life cycle of electro-mobility compared to conventional vehicles: battery and vehicle production is a carbon intensive operation
- ▶2015 Romania: electricity production CO<sub>2</sub> emissions 299,02 g/kWh\*\*

<sup>\*\*</sup> National Energy Regulatory Authority Electricity Market Report, December 2015



<sup>\*</sup>EU Reference Scenario 2016. Energy, transport and GHG emissions. Trends to 2050

## Refineries are part of the solution for reduced emissions

- ► Transport fuels provide a **fundamental service** for the economy and will maintain a **high share in transport services for the foreseeable future**
- ► European refineries have made **massive investments** in reducing energy intensity and emissions and are the most efficient in the world
- ➤ To ensure **long-term** and **cost-effective** conditions for lower emissions in transport, European and national policies should draw from fair and transparent scientific comparisons between technologies

# Petrobrazi is a strategic asset for OMV Petrom and the Romanian economy



years of history. Petrobrazi was commissioned in 1934.

Mil vehicles supplied yearly with fuels from Petrobrazi

100 Integration with OMV Petrom Upstream. Designed to process all Romanian crude.

**1.2 Billion** euro invested in Petrobrazi (2005-2015)

# Following the modernization, Petrobrazi refinery addresses market demand better and more efficiently

- ► Streamlined refining nameplate capacity to process
- ~4.5 mn t/yr domestic crude
- Sweet heavy crude coking refinery
- Complex fuel production facility (Nelson index of 11,5)
- ▶ **Diesel Hydrotreater revamp** started up at the end of 2007
- Gasoline post-treater completed early 2009



### Petrobrazi modernization program (2010-2014): ~600 mn EUR

- ▶ Revise capacity of crude distillation unit (DAV2) to process 100% Romanian crude while ensuring improved yields and energy efficiency
- ► Coker modernization by replacing equipment and therefore ensuring increased throughput and reduced energy consumption
- ▶ **Desulphurization of refinery gases** leading to improved energy efficiency and mapping Petrobrazi emissions to Western Europe standards
- Vacuum gasoil project to increase diesel and other white products production capacity