Hellenic Petroleum: An Energy Group in Transition EKO

HELLENIC

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1 Paneuropean Oil and Industrial Holdings S.A.2 Hellenic Republic Asset Development Fund. 3 Elpedison JV. 4 DEPA.

It is clear that energy transition has accelerated and is affecting the totality of our business and operating model



| Call I wall | | Significant growth in energy demand, but region based Concentrated growth in non-OECD markets | 11% | growth in global energy demand between 2016-2050 |
|-------------|------------|--|------------|--|
| | | Greater use of high-end plastics/petrochemicals Potential regulation risk and increased recycling | 10% | polyethylene from recycled feedstock by 2035 from <1% in 2018 |
| Demand | | Increase in energy efficiency Continuous improvement in vehicle energy efficiency | - 40% | cars energy consumption decline (in MJ/km) between 2018-2035 |
| | Ÿ | More effective switch into electrification Electrification of heating and transport | 10% | OECD households with heat pumps in 2035, from 2% in 2018 |
| | A | Electric vehicles (EV fleet growth) | 46% | EV share of global new passenger car sales in 2035, from 1% in 2018 |
| | 63 ES | Growth of low carbon fuels | ∼1 MMbd | Growth of road transport biofuels in the next 10 years |
| Supply | | Significantly lower cost of renewable energy technologies | 6% | Expected annual reduction in LCOE ³ for solar by 2035 |
| | * <u>*</u> | Rapid decline of battery storage costs | -40% | battery storage cost decline by 2030 |
| | | Reduction of emissions in marine and aviation MARPOL, fuel emissions etc. | 0.5% | max sulfur content in bunker fuel down from 3.5%/1.0% starting from 2020 |
| & Financial | | CO₂ and other emission reduction targets (SOx, NOx) Regulation and goals (COP ⁴ 21, COP ⁴ 24) | 15% | CO ₂ EU fleet-wide emissions reduction between 2021-2025 |
| | | Increasing Environmental Social and Governance (ESG) investor focus | 10 | USD tn of AUM committed divestment from fossil fuel companies in 2020 |
| | | | | |

1 Fast Moving Consumer Goods

2 Internal Combustion Engine

3 Levelized cost of energy

4 Conference of the parties (Paris agreement)

We rise to the challenge of this accelerated transition and take the opportunity to transform our Group



We have a vision to turn Energy Transition into an opportunity by excelling in our core business and developing a diversified energy portfolio



Energy Transition

Key pillars of our strategy

| Transition and improve core Business… | Improving competitiveness, digitization, energy efficiency | | |
|--|---|--|--|
| Maximize value from core | Benefiting from prior investments in value upgrades, development of trading capabilities | | |
| Diversify and develop New Businesses… | Establishing significant position in RES, expand Power & Gas, create options in E&P and new opportunities linked to energy transition | | |
| Health, Safety and Environment Lies at the foundation of our strategy | | | |

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We have a well-laid out plan to deliver upon our strategic pillars by embracing new solutions & technologies

Key solutions and technologies to deliver on our strategic pillars Strategic pillars Wave 1 (2021-2025) Wave 2 (Beyond 2025) Transition and improve Plastic based Hard to abate Green Energy e - mobility Core Business... feedstocks operations efficiency sectors Provide plastic Produce renewable fuels Improvement of energy Develop e-mobility Integrate renewable power into utilities/power-to-x based feedstock to efficiency across all infrastructure and (bio/H_2) for hard-to-abate activities of the Group upgrading units service offering applications, electrification sectors like aviation and of thermal units and steam marine Maximize value from core... Hydrogen Carbon **Bio-based** RES Retail of feedstocks capture portfolio the future Produce green hydrogen to Co-process and blend bio Further adopt digital Capture CO₂ and use to Development of **Diversify and develop** supply refining processes based feedstock to and embrace retail produce carbon neutral **RES** portfolio and new demand from New Businesses... displace conventional oil of the future synthetic fuels co-processing 01 Enablers for the large scale production of low carbon fuels

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PETROLEUM

Transition, improve and grow our core business: we are developing new energy transition opportunities within our existing industrial assets



Energy efficiency: an ongoing investment 2030 target: 10% reduction in energy consumption and CO₂ footprint of our 3 refineries **Digital refineries** Decarbonizing Launched digital transformation initiative targeting €50m annual performance improvements our processes Hydrogen Evaluating options for integrated Green H₂ production to substitute existing H₂ production **Biofuels production** Converted our ether producing units substituting methanol with bioethanol to meet the biofuels content spec in gasoline **Renewable diesel** Decarbonizing our feedstock Developing co-processing ~10 vol.% Used Cooking Oil (UCO) in our HDS process **Plastics recycle** Evaluating technologies for plastics re-use and recycle to introduce in our fuels and petrochemicals production Low-carbon technologies **Participating in** R&D projects related to low-carbon technologies with a special focus on 2nd & 3rd G **R&D** projects biofuels, green hydrogen production, waste-to-fuel technologies, storage, biorefineries

HELPE Group is currently updating its strategic plan and considering the investment projects to be implemented by 2030.

Numerous opportunities linked to energy transition towards lowcarbon fuels and energy portfolio diversification will be evaluated Diversify and develop New Businesses: We are pursuing a bold RES development strategy







Establishing a significant portfolio



Targets for installed capacity:

- 300 MW by 2021
- 600 MW by **2025**

Diversify and develop New Businesses: We will achieve our targets through a diversified strategy, both with regards to origination and to use of technologies





Combination of Organic Development and Acquisitions



Diversified Renewables
Projects Portfolio
> 1.3 GW (PV, Wind, Biomass) at various stages of development



Acquisition of Mature Projects / Projects in Operation Ð

PV project in Kozani: a flagship Energy Transition project







First major project contributing to the transition to the post-lignite era and the development of Western Macedonia



Investment of €130 mil.

>35% of materials, equipment and employment sourced from Greece; targeting to maximize content from W. Macedonia region



350 jobs opportunities are expected to be created, mostly locally, during the construction stage of the project; tens of direct and indirect local jobs during operation



Largest RES project in Greece – 204 MW

One of the largest PV plants in Europe, corresponds to 9% of the PV capacity in the interconnected system



Development of low CO₂ footprint activities



Annual generation of **350 GWh zero-emission energy**, enough to supply 75,000 households

320,000-ton annual CO_2 emission reduction benefit, equivalent of 1.1mil. acres of forest We believe that ESG is not just a socially responsible move but a unique opportunity for companies that embrace it ; it can be the next 'secular theme' to outperform the market

100



- TMT (from Jan-96) - BRICs (from Jan-02) - US IT (from Jan-16) - EU ESG (from Jan-19)
Performance normalized to 100¹

150

200

Time post 'start' of circular theme acceleration, weeks

1. TMT: MSCI World IT compared vs MSCI World; BRICS: MSCI BRIC compared vs MSCI World; US IT: MSCI US IT compared vs S&P 500; ESG: MSCI Europe ESG Leaders compared vs Euro Stoxx 50

50

250

Thank you