# LAVÉRA REFINING & PETROCHEMICAL CLUSTER



#### **TOTAL AREA OF 450 HECTARES OF WHICH 60 ARE AVAILABLE**

# **SHARED SERVICES/UTILITIES**

STEAM	3,5 bars, 25 bars, 80 bars	
ELECTRICITY	Connection to national grid through 4 stations 63KV and 4 stations 225 KV (ie 500MVA installed)	
INDUSTRIAL FLUIDS	Industrial water / demineralized water / decarbonated water	
INDUSTRIAL GASES	Natural gas / compressed air / hydrogen / nitrogen / oxygen / CO <sub>2</sub>	
TREATMENT OF EFFLUENTS	Wastewater treatment plant	
POSSIBLE CONNECTION TO	All utilities: steam (various pressure levels), electricity, water, air, nitrogen, was- tewater treatment	
SAFETY/SECURITY	Medical care service / fire department / employees are trained in the first aid / firemen specializing in chemical risk	
TELECOM & DATA	Plug&Play connection/optical fiber high-speed internet/telephone network	
TECHNICAL SUPPORT FUNCTIONS	Administrative and technical support in obtaining authorizations / risk and HSE (hygiene, health, safety, security, environment) management HSE charter / equipment inspection service certified by the French authorities Industrial maintenance / analytical laboratory	
INFRASTRUCTURE MANAGEMENT	Rail traction, logistics, warehousing; data processing, rental of buildings, meeting rooms	

## **OPERATIONS / PRODUCTS**

- 14 million tons
- Petrochemicals: ethylene propylene, butadiene, butylenes, benzene, ethylene oxide and derivatives, polyisobutene, polyethylene, polypropylene, C4 and C8 OXO aldehydes and alcohols,
- Chlorochemicals: chlorine, caustic soda, chloromethane, ferric chloride, vinyl chloride monomer (VCM)
- Ethoxylation of fatty alcohols
- Refinery products: propane, butane, gasoline, jet, gasoil, fuel and bunkers
- $\diamond$  Industrial gas:  $H_2 O_2 N_2$
- Power production: gaz turbine



## **CHEMICAL PARK SPECIFICATIONS**

- ♦ 13 companies on site:
  - Air Liquide
  - Appryl

  - · Ineos Chemical Lavéra · Naphachimie
- Lavéra Energie

- Petroineos Manufac-
- Wilmar France Hol-
- ♦ **Security:** Seveso III-certified site (high level of security), fenced site, guarded 24/7
- ♦ Certifications at industrial level: ISO 9001. ISO 14 001. ISO 50 001
- ♦ **Originality of the site:** connected to Lavéra/ Fos harbor, refining oil and gas pipes lines, ethylene and propylene pipeline, refining and petrochemicals integrations, energy-intensive industries



## SPECIFIC SERVICES/UTILITIES

- ♦ Cooling water, decarbonated water, mineralized
- cals, natural gas, industrial gas
- Pipelines, sewers
- HR management (salary, administrative procedures), training center
- Pooled purchasing
- ♦ 2 canteens available for external workers
- Analytical laboratory: analytical Development, Catalyst Development, modelling

#### **INFRASTRUCTURE**

- 30 mins from Marseille Provence International Airport
- Connected to various motorways: A54 to A7 (North, Lyon)/A54 to A9 (South, Spain)/A55 to A8 (East, Italy)
- Marseille Fos Harbor: France's largest port, main gateway to southern Europe Container and bulk (liquid, solid)/oil, gas, chemicals facilities/ Draught: 10.50-18 meters Water connection: access to Rhône river
- 30 mins to high speed train stations of Aix-en-Provence and Marseille
- Direct connection to the rail network

#### **NETWORK: INNOVATION AND POTENTIAL PARTNERS**

LOCAL INNOVATION CLUSTERS	EPOS	Symbiosis in Industries with Arcelor Mittal, Veolia, OMYA, CE- MEX, Ghent University, Lausanne federal university
RESEARCH CENTERS	Lab in Aix Marseille universities, Lausanne federal university	Research centres M2P2: mécanique, modélisation et procédés propres, Industrial Process and Energy Systems Engineering (ipese), C2P2: Chemistry, catalyst, polymers and processes
UNIVERSITIES	Aix Marseille University	One of France's top five universities. Many specialist areas, seven scientific departments
	Centrale Marseille	Part of the French engineering school network
	National School Sup. Chemical Industries	One of France's top in chemical engineering
	National School of Engineering in Chemical and Technological Arts	One of France's top in chemical engineering
POTENTIAL PARTNERS	In this industrial area	Main industrial sites nearby: Lyondell Basell (Berre-Fos), Geogas, Geostock, ExxonMobil oil Refinery, Total La mède (training center, biofuel refinery, solar farm), Lavera Harbor, severals hundreds of contractors in all industrial maintenance areas