Local shipowners together with port operators have been holfding since a long time the vison of a green port in a « blue » maritime shipping. They have succeeded in the Global Cap 2020 as they invest massively well in advance in new technology, in green bunker :

- Cold Ironing
- Exhaust Gas Cleaning System
- > LNG
- Switch to 0,5% sulfur Fuel Oil
- Support for SECA zone for Méditerranée
- Green Handling at Marseille & Propeller Reblading
- ➤ Modal Switch: transport of container by train or barge instead trucks
- ➤ Plan « Escale 0 fumée » (0 smoke call) supported by the Président of the Region SUD with 60Me investment

COLD IRONING

RoPax shipowners La Meridionale & Corsica Linea have invested together with the Grand Port Maritime of Marseille-Fos in Cold Ironing. La Meridonale started to connect their ships in 2017 followed by Corsica Linea in 2019. the 2 companies have fitted Cold ironing equipement in 6 ships:

For la Meridionale : GIROLATA, KALLISTE, PIANA



For Corsica Linea: JEAN NICOLI, PASCAL PAOLI, PAGLIA ORBA

Each company Terminal is equipped with 2 cold ironing bracket connections. Each braket can deliver a power up to **2 MW** and the 4 brackets can be connected at the same time.

A call connected represents around **20MT of CO2 less** compare to a call on generator

It has to be underlined that the companies invest 5 M€ each in equipping ships and the GPMM around 1M€ in the bracket, electrical station, cables, system...

GPMM is continuing in going on with his « Cold Ironing » politic :

- 2 Brackets connections by 2022 at Cap Janet International Maghreb Terminal (2MW each)
- 4 Brackets connections by 2025 at the Cruise Terminal (10MW each)
- 2 Brackets connections by 2026 at CNM Shipyard (10MW each)

Also some Projects of mobile connection with LNG generator are going on for the Digue du Large ships call. Test were realised on Girolata and were successfull







\$ LNG

Since 2017, the GPMM, several Shipowners (as Corsica Linea, CMA CGM, Gazocean, MSC & Costa Cruises), TOTAL Energies and LNG plateform association have been working on having LNG ships calling in Marseille- Fos and solution to bunker LNG by barge or truck; LNG is the cleanest fuel in the industry at this time:

- 99% of SOx & PM, 85% of NOx, and 22% of CO2
- CMA CGM: at the end of 2024, 44 of the group's vessels will be powered by LNG with an investment close of 2 B€. in 2020, the "JACQUES SAADEE" biggest Container ship LNG powered in the world has been launched. And first LNG vessel called Marseille-Fos in 2021, with first LNG bunkering done on CMA CGM BALI by the bunker vessel of Total Energies GAS VITALITY in January 2022 (pix 1)
- PONANT: In June 2021, has taken the delivery of the "COMMANDANT CHARCOT", first Expedition Polar vessel LNG powered
- CORSICA LINEA: end of summer 2022, A GALOETA (pix 2), first LNG powered vessel liner from Marseille to Corsica, will arrive in Marseille port. She has been built in Italian Vinsentini shipyard for an approximate cost of 160M€ and will be bunker at first by truck then by the bunker barge TITAN KRIOS







EXHAUST GAS CLEANING SYSTEM

In order to be ready for the Global Cap 2020, local Shipowners (as Corsica Linea, CMA CGM, La Meridionale), have been installed on several ships of their fleet Exhaust Gas cleaning system ordinary called « Scrubbers », that emits between 12 at 15 times less Sulfur and PM

- **CMA CGM**: **56** of the group's vessels have been fitted with scrubbers in 2020. it will go up to 80 vessels with a total investment of 800M€. (*pix 1*)
- LA MERIDIONALE: The PIANA has been fitted with a dry system for 20M€ (pix 2)
- **CORSICA LINEA**: in 2020, 5 vessels of the company (JEAN NICOLI *pix 3*, PASCAL PAOLI, PAGLIA ORBA, VIZZAVONA, NEPITA) were fitted with scrubbers for an investment of 30M€. Installation of close loop system will be soon completed on 3 remaining ships ships





