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SDSN ITALIA

FONDAZIONE ENI ENRICO MATTEI

www.sdsnitalia.it

www.feem.it

Logistics of the future in Sustainable Smart Ports

What is the real meaning of “localization”?

What is a “partnership for the goals”?

A Public-Private-Partnership initiative develops an “SDGs-Smart Port” model and analysis whose aim is to point out the potential correlation between the port’s operations empowered by the digital transformation through 5G technologies, the city port and the SDGs.

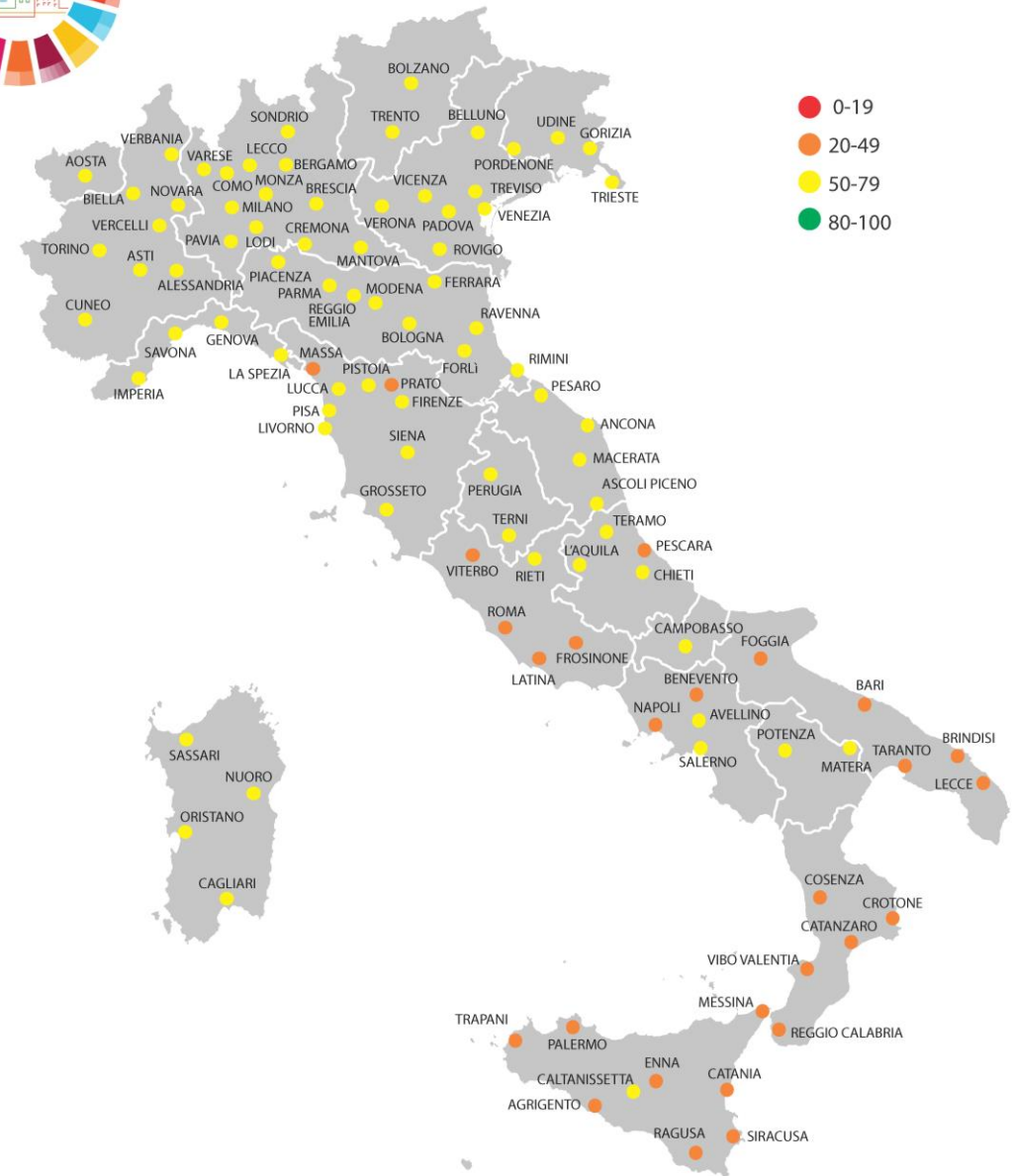
How to be concrete while scaling down the SDGs

Early a tool for policy makers was proposed: the **SDSN Italia SDGs City Index**. Majors would have understood more about the Agenda 2030 and where they are placed on the path towards sustainability.

We localize!

Is this enough?

How can a port city be more sustainable? How can it help the surrounded area meet the 2030 Agenda?



5 for 1

5 ENTITIES , 1 GOAL: TO LOCALIZE

1. FEEM: non profit international research center;
2. AdSP: Livorno public port authority;
3. ERICSSON: private company, 5G technology;
4. CNIT: non profit, inter-university consortium for telecommunications;
5. TIM: private company, telecom operator.

169*38

THE COMPLEXITY

The number of targets of the Agenda 2030 to be matched with the harbour process .

- 74% of the goods entering or leaving Europe go by sea;
- 1.5 million workers are employed in EU ports;
- 147 million tons of CO₂eq is the impact of the maritime transport in EU in 2018 (16% of the world ones).

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5G BENEFITS FOR THE PORT RELATED TO THE 2030 AGENDA

5G technology is a key-driver.

ICT and digital transformation have the potential to save 15% CO₂eq in all the sectors, including Logistics and Transport.

“Coming together is a beginning, staying together is progress, and working together is success.”

HENRY FORD (1863-1947)

Results



SDGS-SMART PORT MODEL

New model with a set of **innovative KPIs** which consider the **digital transformation enabled by 5G** as the main lever for the port performance evaluation and SD.

Impact: reference model to govern and make decisions for sustainable development of the port-city area.

SDGS-SMART PORT ANALYSIS

Analysis of **enabling power of 5G** technologies to evolve the port's processes with respect the SDGs.

Impact: **Port empowerment** and leadership to evolve towards innovation and sustainability actions with 5G

SDGS-SMART PORT AND 5G POSITIVE IMPACTS

Impacts:

SDG 8: Competitiveness and more safety for workers;

SDG 11: Sustainable growth for the port-city;

SDG 12: responsible business in logistics;

SDG 13: estimated environmental 8,2% CO2e saving * **

(*) case study "EU H2020 Corealis 5G"

(+*) To be validated following the *on the field* trial

SHOULD THE PORT INVEST IN
«A NEW TECHNOLOGY»?

APPLICATION OF THE MODEL &
SIMULATIONS

IMPACT ANALYSIS

FINAL DECISION &
PORT PLANNING

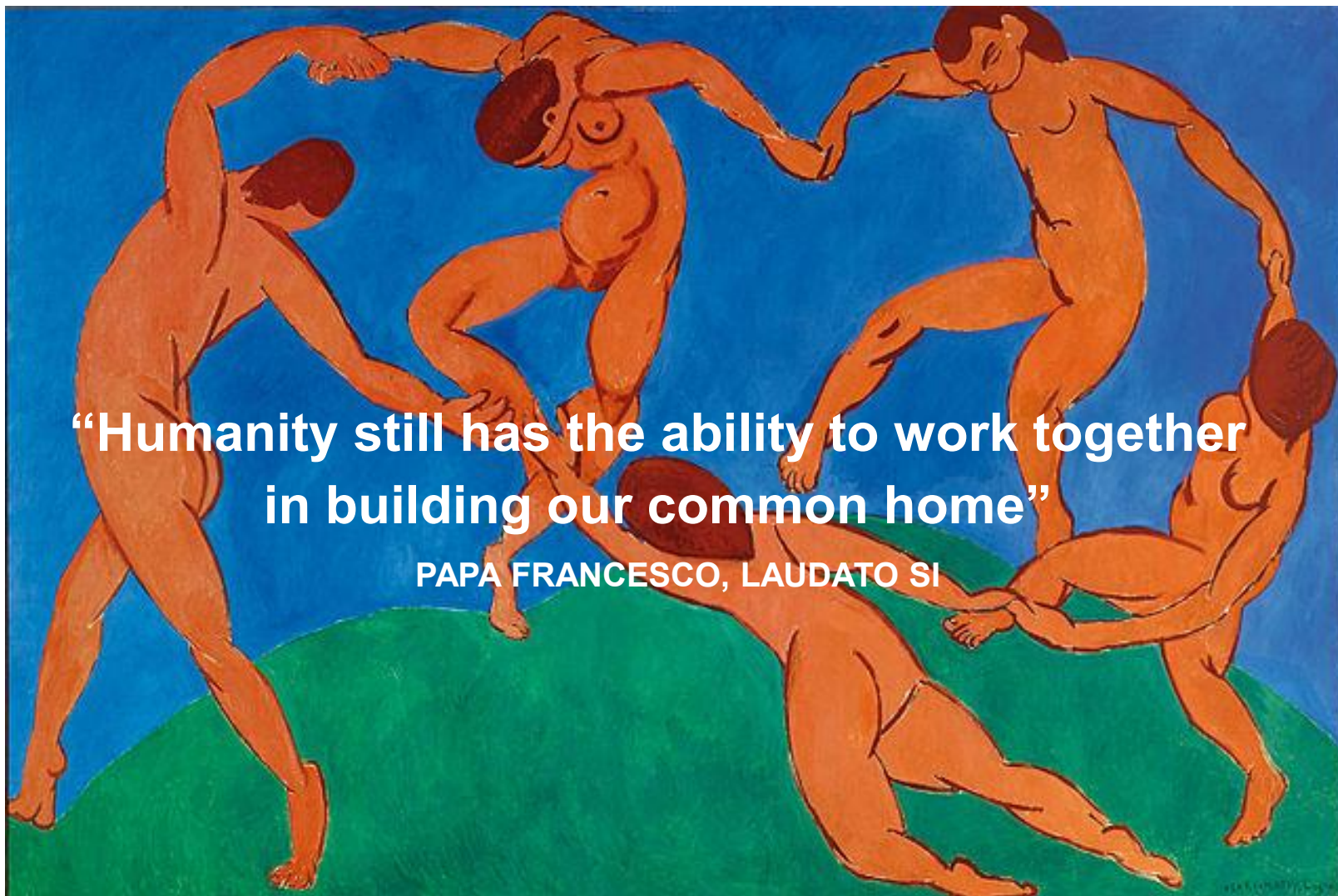
Livorno Port's testimony

“The *SDGs-Smart Port model* enables to address the Port Strategy, in terms of technology assessment.

Nowadays, identifying the right technology is important as well as investing in the right facility.

Ports need a common measurement framework to be more competitive and to improve their planning.

This is what the Port of Livorno has achieved by contributing to this initiative”.



**“Humanity still has the ability to work together
in building our common home”**

PAPA FRANCESCO, LAUDATO SI