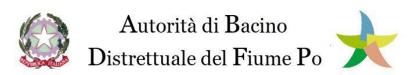
# Ecomondo 2022





# STATES GENERAL OF THE GREEN ECONOMY

in collaboration with

The new challenges for Italian companies in the ecogical transition

High costs of energy, raw materials, and climate crisis

8 and 9 november 2022 | IEG Expo - Ecomondo - Fiera di Rimini

promoted by National Council of the Green Economy

## THE CIRCULARITY OF WATER

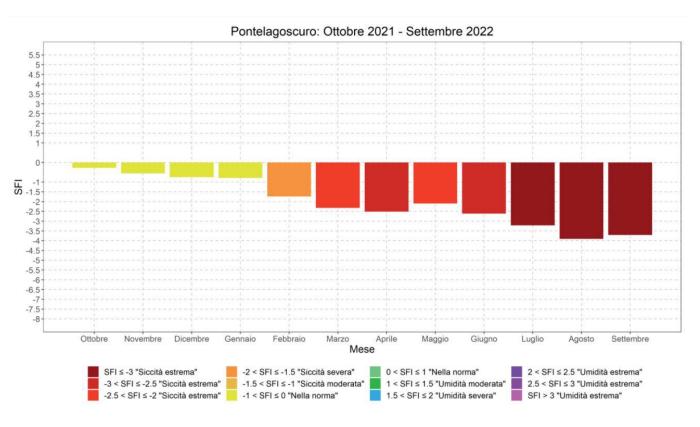
**Dott. Alessandro Bratti**Segretario Generale

### Hydrological year 2021-2022

The Hydrological year 2021-2022 has been characterized by rainfall much lower than the climatic values, negligible snowpack, and temperature values generally higher than typical ones.

The flow rate values remained lower than the typical ones for the year, with values even lower than the minimum ones for many days.

#### **Standardized Flow Index**

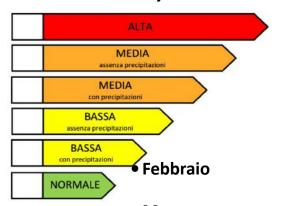


Average monthly flow observed with a return period of 50 years

### Hydrological Year 2021-2022

Due to this meteorological and hydrological situation, the Permanent Observatory on water uses in the Po River Basin District met 16 times

#### **Water Severity Scenario**



Water Severity Scenario defined by **Permanent Observatory on water uses in the Po River Basin**• Aprile

- Maggio
- Giugno
- Luglio
- Agosto
- Settembre
- Ottobre

# **Main criticalities**

Agriculture difficulties mainly before the harvest of some species (drought, water scarcity and irrigation problems)

Environmental problems: respect of ecological flow in Po river and its tributaries

Saline intrusion phenomena in Delta Po River very huge (From 25 tu 40 Km)

Dangerous situation concerning groundwater quality and quantity
Critical situation in energy power plants (Hydro and cooling system in gas natural plants)

Very few problems in drinking water supply.

### What are the most urgent interventions in the Po basin?



Governance at the District level



Climate Change Adaptation ( we do not have a National Adaptation Plan approved and we don not a law on Climate change)



Infrastructures: (we need different kind of infrastructures based on specific territorial demands)

- Nature-Based Solutions (NBS)
- Irrigation ponds (Piano Laghetti)
- Reservoirs

### PNRR-M2C4.13.3 Renaturation of the Po river area - Integrated interventions



### **Hydraulic-morphological interventions:**

- Reduction of the artificial riverbed, alongside the adjustment of navigation groynes and the decommissioning/ modification of defense works;
- Restoration and re-opening of oxbow lakes, abandoned branches and opening new fluvial branches

#### **Environmental – naturalistic interventions:**

- Requalification of oxbow lakes and of abandoned branches;
- Reforestation;
- Control of invasive alien species

### PNRR-M2C4.13.3 Renaturation of the Po river area - Integrated interventions





56 Project areas



Total amount by 2026: 357 000 000 €