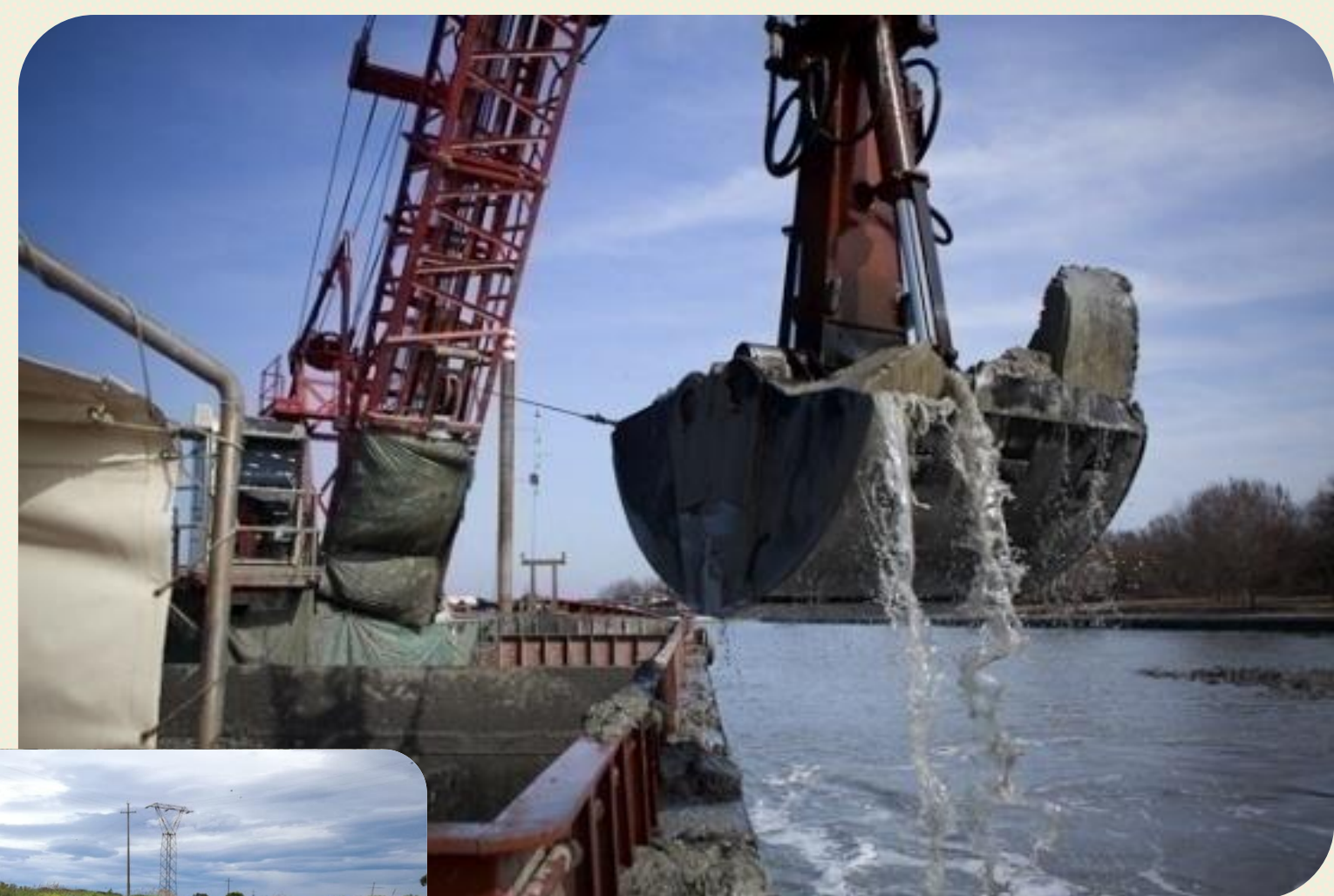


# Co-composting of sediments and green waste as technology for producing innovative growing media for plant nursery "LIFE AGRISED LIFE17 ENV/IT/000269"

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**Sediments** are regularly dredged in harbors and waterways to maintain sufficient depth for navigational access



The **projected** started on 1 October 2018 and will finish on 30 September 2021. Following are presented the activities planned for the growing tests in the project

**Green wastes** constituted of branch, leaves, grass cuttings etc., represent an underutilized waste category



Among the bioremediation process, co-composting can be feasible, effective and low cost techniques to recycle polluted sediments also improving their structure and nutrients content

Green wastes will be obtained by maintenance of public and private green areas. They represent the main C and nutrient sources that stimulate the microbial activity

**CO-Composting**  
Sediments and Green wastes mixed in three ratio (w:w):  
1:1; 3:1; 1:3.

6-8 months for full maturation and stabilization of the composted materials. Compliance with Italian regulation for agronomic substrate (D.lgs 75/2010)



**Monitoring activities**

The co-composting process will be monitored every 30 days in terms of:

- ✓ temperature,
- ✓ humidity,
- ✓ bulk density
- ✓ humic substances
- ✓ pollutant contents
- ✓ Microbial communities
- ✓ Enzyme activities

**Growing media for plant nursery**

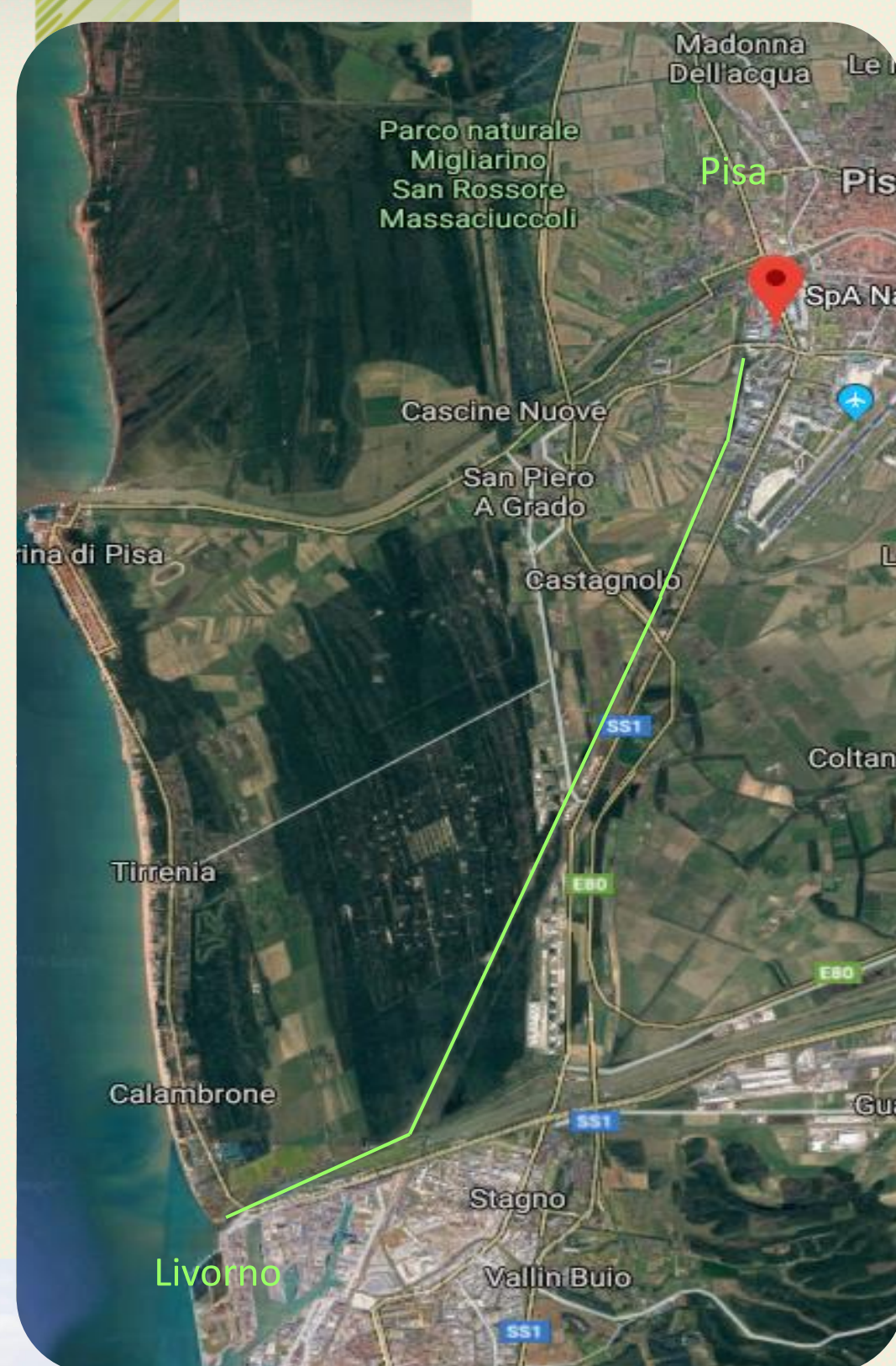
*Photinia x fraseri*



*Viburnum tinus*



Length: 17 km  
Width: 30 m  
Depth: 3 m



Sediments will be obtained by the Navicelli canal (a navigable canal that connects Pisa to Livorno and flows into the sea)



Sediments will be dewatered until a moisture level of about 40-50%

**AGRISED**

LIFE17 ENV/IT/269 "Use of dredged sediments for creating innovative growing media and technosols for plant nursery and rehabilitation"

Coordinator beneficiary



Associated beneficiary



Consiglio Nazionale delle Ricerche  
Istituto di Ricerca sugli Ecosistemi Terrestri

