Sustainable waste management of the invasive Giant Reed

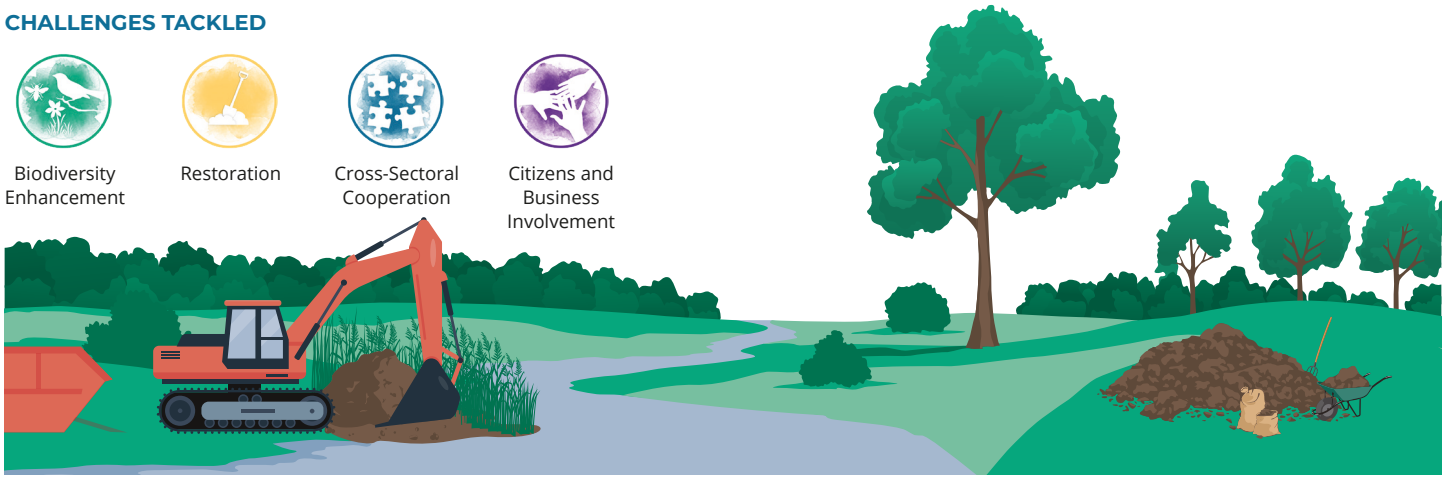
A pilot project to promote circular economy by transforming plant waste into compost

BARCELONA METROPOLITAN AREA (AMB)

AMB Àrea Metropolitana de Barcelona

CHALLENGES TACKLED

- Biodiversity Enhancement
- Restoration
- Cross-Sectoral Cooperation
- Citizens and Business Involvement



SUMMARY

The invasive cane (*Arundo donax*) is a plant residue that could be used as a compost, however no waste management plants accept it. This pilot action explores new ways to achieve a sustainable management of the plant residue of the *Arundo*, once extracted.

Pilot projects like these can be seen as trial-and-error exercises, that allow the introduction of innovative and new approaches to managing a natural space.

STEPS

1. Manual extraction of the reed aerial part;
2. Soil excavation with the help of machinery in order to reach and extract the rhizome;
3. Transportation of both parts, in separate containers, to the waste plant;
4. Processing of the rhizome container content with a trommel, separating three types of fractions: fine-grained arid (sand), medium-sized elements (pebbles) and larger elements (rhizome);
5. Drying of the rhizome fractions (6 months);
6. Monthly monitoring of the waste in order to check if there is any sprouting. If not, it can be used as compost.

RESOURCES NEEDED

For this project to be a success, coordination was needed amongst two different departments (Green Infrastructure and Waste Prevention).

STAFF INVOLVED

- 2 architects and 2 engineers;
- 4 employees of the extraction and transport company;
- 2 employees of the waste plant.

MAIN LESSONS LEARNED ALONG THE WAY

Invasive species pose problems in many natural areas, however there are ways of eradicating these plants, whilst also closing the waste gap and promoting the conservation of habitats and biodiversity by using Nature-based Solutions (NbS). This trial project considered NbS in all phases of the project: planning, design phase, management and maintenance of the subsequent space.

The full report of this action can be found at URL
www.europarc.org/greening-plans

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