

Green Entrepreneurship

Successful business cases of Green Entrepreneurs in the Mediterranean



Regional Activity Centre for Cleaner Production



Worm SNC and Carretta Caretta: Waste organization and reduction management in Italy

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Name: Worm SNC and Carretta Caretta
City, country: Augusta, Italy
Name of entrepreneur/ founder: Paolo Garelli and Roberto Pirani

Description Since 2008 WORM works in the environmental sector, specially in the field of urban waste collection. The key asset is to re-think the collection of waste in an unconventional perspective, increasing the perception of the garbage as resource. Another key asset is to enhance the connection of the waste collection behaviour with social, economic and cultural patterns that are well accepted within the local context. WORM snc takes move and develops from the initiative “Carretta Caretta”, a small truck traditionally used for the transport of goods and in this case re-equipped for serving into the waste collection especially in historical towns with narrowed streets. The small truck stops in prescheduled spots of the town and invite citizens to dispose their pre-sorted waste.

Investment *Start up capital:* EUR 5,000.
Rate of return on investment: almost 200%
Sources of funding: Personal.

Stakeholders Public-shared companies, citizens, town councils: Comune di Lipari (Stromboli), Comune di Atina (Frosinone), Comune Santa Marina Salina, Comune di Roma, Comune di Procida, Comune di Spadafora (ME), Comune di Mantova, Comunità montana dei monti Lepini (Frosinone), Comune di Terracina (Latina), Comune di Ventotene.

Employment generation WORM counts only two members and full time employees, an environmental engineer and a project designer. Once that the Carretta Caretta program is defined and implemented, a variety of functions are generated. Generally speaking, the program produce a clear re-qualification of human resources and skills, with a consequential cost-effectiveness and added value for the municipalities involved into the scheme.

Timeline WORM was born in 2008 with the aim of spreading the Carretta caretta patent, mainly in villages and small towns, and of working to reduce, reuse, recycle and organize waste collection.

Feasibility study The feasibility study was carried out in 2008 and a short description is available here: www.carrettacaretta.com/?p=6

Geo-social-economic setting Not available.

Key features	The Carretta caretta patent is a system that improves waste collection in historical city centres, where big waste collection trucks find it difficult to enter. Together with a small truck, the staff is totally re-organised and performs several functions during the waste collection, together with the promotion of a proactive attitude among citizens and users.
Overall rational and motivation	Several statistics point out that in Italy the waste sorting works only up to 20% without a door to door collection. Caretta aims to combine the education of the population with an easy collection, accessible to everybody.
Strenghts	<ul style="list-style-type: none"> • Increases economic savings. • Improves citizen environmental awareness and relationships. • Increase recycle. • Empower the status of dustmen and street sweepers. • Reduces traffic. • An holistic approach to consumption and waste behaviour. See video: www.youtube.com/watch?v=f3vg90aGf-c
Challenges and constraints	<p>The progressive reduction of incomes for municipalities is increasing the need of a better management with lower costs for key services like waste collection. Carretta caretta offers a solution that is at the same time easy and inexpensive. Therefore, the initiative is recently encountering a series of new opportunities, also thanks to the raising awareness on environmental related issues. However, the following constraints remains to be underlined:</p> <ul style="list-style-type: none"> – the waste management is in Italy solidly in the hand of lobbies that are connected with strong economic interests which are difficult to be replaced. – the licence and copyright on Caretta caretta is difficult to be protected and WORN already experienced several counterfeits and illegal duplications (a legal trail is currently in progress with the Rome Municipality). – while the initiative should be implemented in its integrity with the full reorganisation of the waste collection system, there is the risk that municipalities just use the small truck without following the full reorganisation and upgrading of the staff. <p>Not always municipalities proved to seek for cost-effectiveness and often they prefer more costly and politically driven solutions (for instance connected with landfills).</p>
Direct activities and Impacts	<p><i>Social:</i> more confidence, trust and reciprocity between citizens. <i>Environmental:</i> decrease of waste and use of energy. <i>Economic:</i> less cost and more benefit.</p>
Use of innovative Technologies	While the truck is upgraded with several technologies recently applied to the waste collection (balances, semi-automatic arms, displayers) the innovation is more focused into the human and organisational aspects.
Evidence of a holistic approach/world view	Carretta caretta is a very visible small scale example of the cycle of production, consumption, waste, recycle.
Scale of benefits	Improvement of quality of life, especially in the Mediterranean historical downtowns. Upgrading and poly-functionality of operators into the waste sector. Increase of awareness among citizens. Sharp amelioration of the quality of the waste (CONAI).

Policies, incentives and regulations needed

EU regulations June 2010 introduce key principle on recycling and thresholds of waste production: “the EU society is founded on the recycle and on the free market”
In Sicily, the New Regional Plan introduces a total renewal of the Solid Waste Management in 14 ottobre 2010.

Lessons and recommendations

Not available.

References

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