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NOW PROJECT NO MORE ORGANIC WASTE



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LAYMAN'S REPORT

Proposing Body



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NOW PROJECT

No More Organic Waste

The LIFE+ NOW-No More Organic Waste project has put to the test a new organic waste management model in the city and province of Brescia. The waste in question, which meets certain quality, health and hygiene requirements, is donated and reused as food for the socially deprived in the local community. The project was developed between years 2011 and 2014 by a type B social co-operative based in Brescia and set up in 1995 (Italian Law n° 381/1991) with the goal of integrating the socially disadvantaged through work: CAUTO - Cantiere Autolimitazione Onlus.

This co-operative - the single Proposing Body - based the development of its model on virtuous synergy between several stakeholders in the local area:

- CAUTO Coop. Soc. Onlus, the non-profit organisation that manages waste, from selection to transport, donation and eventual disposal;
- Mass Retailers, who donate their un-sold products, with immediate economic benefits in terms of a reduction in their scrapping costs and validity/value;
- municipalities and the municipal agencies where the supermarkets have their outlets;
- inhabitants of these municipalities and others covered by the project, who will benefit from a reduction in waste levels and thus lower CO2 emissions, leading to less environmental impact;
- schools, students and their families benefitting from an ecology education programme aimed at enriching their environmental culture and experience, leading to changes in their own behaviour and the adoption of a sustainable lifestyle;
- charities that receive the food and distribute it to the needy, otherwise unable to satisfy the demand for such food;
- non-profit organisations, able to reproduce this virtuous business model to create jobs for the disadvantaged and so turn the opportunities offered by the environment into social, environmental and economic benefits.

SOCIAL INTEGRATION ENTERPRISE - THE DONATION ECONOMY - CIRCULAR ECONOMY

NOW is a response to the environmental and social problems caused by the waste generated by mass retailers, especially waste food products.

It combines the model of a social integration enterprise with new models for a circular economy based on the prevention of waste, its recycling, reuse and donation and the concept of “non-profit”. The NOW model applies the principles of the circular economy to waste management, thanks to the special role played by CAUTO: service provider and social integration enterprise. As a result the project was directed towards pursuing a form of economy aimed at producing social benefits, where “non-profit” and donation become an integral part of the business model.

Through NOW, CAUTO has experimented with a model whose main strength lies in the integration of different aspects:

- waste collection services and donation economy;
- social integration enterprises and service providers.

As a result, unsold food products that are still suitable for consumption have been recycled instead of being sent for disposal as organic waste. This means that the energy and resources used to produce and distribute these food products have not been wasted and the environmental cost of disposing of them as organic waste has been avoided. In other words, there have been multiple savings for businesses, the environment and society. The reintroduction of these products has benefitted the deprived sections of society, as well as generating social benefits and economic savings for the charitable associations involved in the project. Thanks to the considerable volume of such products and the overall extent of the project, new jobs have been created and the various stakeholders have learnt to work together, thus strengthening existing networks and creating new ones.

NOW makes it possible to satisfy the supply and demand by means of non commercial exchange: a win-win situation for all those involved.

THE 6 STEPS OF THE PROJECT

STEP 1

Analysis of the legal requirements, data and literature concerning the management of organic waste on a local, national and international level, with special reference to the provision and goals of European standards.

STEP 2

Definition of the integrated management system for waste coming from mass retailers, with special attention to the organic fraction. Agreements concerning the management and donation of waste with certain municipalities, municipal agencies and mass retailers operating in the province of Brescia.

STEP 3

Implementation of the integrated mass retailers' waste management system, including the organic fraction. A schedule of meetings with the municipalities and the mass retailers to establish a system for selecting the best equipment to improve the performance of the waste separation process and to reduce the amount of general waste produced by managing the organic fraction.

ACTION

2012 PILOT SCHEME

NOW involved 8 supermarkets in the city of Brescia having sales outlets with a surface area of less than 2,500 m² and where no CAUTO personnel were needed. The waste was selected by the outlet employees, after receiving proper training, and then collected by CAUTO. 7 of the supermarkets belong to the SMA group, which has 280 "Simply" sales outlets in Italy, and one Conad supermarket: all three brands have a proven track record when it comes to awareness of the problems involved in turning waste to account and the possibilities of donating food to charity. Municipalizzata Aprica S.p.A. (the A2A Group) was the waste collection agency used by the city of Brescia and the main multi-utility firm in the province. CAUTO had already been providing this firm with various services for many years.

2013 PRE-INDUSTRIAL PILOT SCHEME

The NOW model was extended over a larger area, including neighbouring towns and various mass retail sales outlets. This stage also involved awareness-raising campaigns for the public and local schools. The system was extended to include sales outlets in the municipalities of Concesio (population: 14,000), Botticino (population: 10,000), Mazzano (population: 11,000), Roncadelle (population: 9,000). These all lie close to Brescia. CAUTO already provided them with various ecological/

STEP 4


Food donations and the avoidance of organic waste by planning a food donation network based on agreements with the mass retailer groups as permitted by current law.

STEP 5

Communication, diffusion and dissemination of the project and its results. Replication and transfer of the project to other organisations and areas by means of an ad hoc integrated communication plan (website, environmental awareness education in local schools, events and workshops, Cauto open-days, networking with European bodies and similar projects dealing with the reduction of waste coming from mass retailers, scientific/technical publications).

STEP 6

Management and monitoring of the project to co-ordinate its full application, guaranteeing the prompt and effective implementation of connected activities. Networking with other LIFE projects.



environmental services. The service was extended to include 3 SMA “Simply” supermarkets and 3 Auchan hypermarkets (Auchan has 57 sales outlets in Italy). The hypermarkets have sales floors of more than 2,500 m² and so the presence of CAUTO operatives was requested to select the waste products and handle the organic fraction.

2014 FIRST COMPLETE APPLICATION

NOW was extended to cover the entire Province of Brescia thanks to agreements with other mass retailing groups. The system was extended to include sales outlets in the municipalities of Sarezzo (population:13,000), Gussago (population:16,000) Villa Carcina (population:11,000), Moniga del Garda (population:2,500), Bedizzole (population:12,000), Desenzano del Garda (population:27,000) and Salò (population:10,000). These lie at some distance from Brescia (up to 30 km away). Cauto already provided them with various ecological/environmental services. The service was extended to include 10 Italmark supermarkets, 1 Bennet supermarket and 1 Conad supermarket. Agreements were entered into with the Italmark mass retail group, owner of 52 sales outlets in Italy, and with the Bennet group, owner of 67 sales outlets in North Italy. Agreements were entered into with two municipal agencies - Garda Uno and Azienda Servizi Valtrompia - who manage environmental services in two important areas of the province of Brescia, where CAUTO already provided various ecological/environmental services.

FOOD WASTE: FACTS AND FIGURES

According to the estimates provided by CAUTO when analysing the context of the NOW project, some 10 tons/annum of waste is produced for every million Euro in turnover, totalling about 1,300,000 tons of waste produced by the supermarkets each year. Roughly 400,000 tons of this waste could be recovered and recycled. At present, just 2% of this waste is donated in Italy.



NOW: FACTS AND FIGURES

RECOVERY AND DONATION

Italian Law 155/03 Legislation is of fundamental importance when it comes to containing and managing waste. Issue n° 150 of Italy's Gazzetta Ufficiale dated the 1st of July 2003 saw the publication of Law 155/03 (Discipline governing the distribution of food products for social solidarity purposes)

26 supermarket outlets have implemented the NOW organic waste management system

1500 tons of food have been recovered and donated to local beneficiaries

5000 people every week have received food

70 beneficiary bodies

DIFFUSION, DISSEMINATION AND COMMUNICATION

60 visiting bodies

600 school students have been made aware of the problem of waste food products and the solution offered by NOW

3 replications of the model (Capriolo, Perugia e Vittorio Veneto)

1 national prize awarded by Federambiente and Legambiente in 2013 for the reduction of waste

NETWORKING

6 networking projects

2 organised events

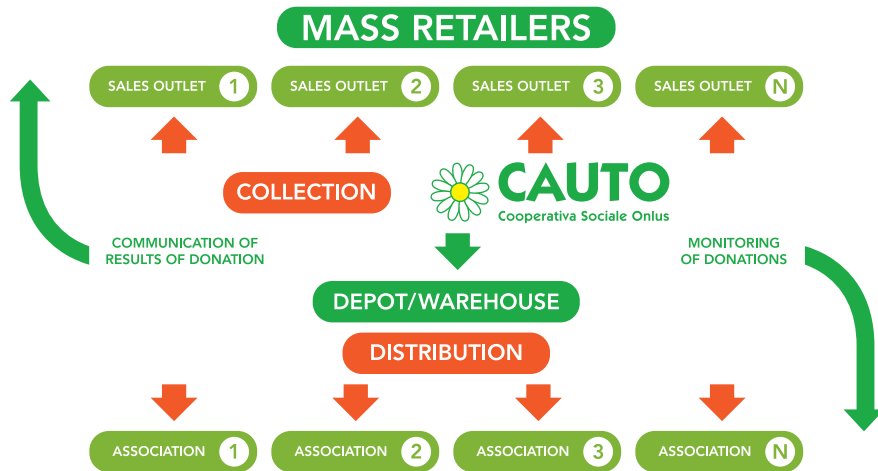
18 promoters of a petition to the Ministry for the Environment concerning changes to the law

EMPLOYMENT

12 new jobs created thanks to the application of NOW

THE NON-WASTE CHAIN

Food-bank: re-distribution for social purposes



Both the mass retailers and the charitable associations benefit from the addition of a body in the distribution chain that collects and then re-distributes the waste food products. The charities are guaranteed a constant supply of food, allowing them to plan their operations better and make the most of their resources. The mass retailers, on the other hand, benefit from a reduction in waste disposal costs, tax incentives and optimised logistics. Society as a whole also benefits from this process thanks to a reduction in waste and the corresponding environmental impact, not to mention its positive effects on a social level. The NOW food-bank is a tool allowing for re-distribution of surplus food coming from the mass retailers. It is of prime importance for Cauto, as it embodies the co-operative's Mission: less waste and consumerism; creation of social, environmental and economic value; promotion of the dignity of man. It provides a good example of how one can reduce waste and turn any waste to account, at the same time generating benefits for the local area and society. Furthermore, the NOW model for the management of waste food products is strengthened by the way it involves a series of complementary environmental services (especially those dealing with waste coming from the mass retailers), thus leading to an alternative solution for the handling of organic waste.

THE RESULTS

REDUCED WASTE AND REUSE

- 25%** reduction in overall waste production
- +**70%** separated material
- +**95%** of the organic fraction recovered
- 10%** of all the recovered organic fraction sent to kennels, catteries and farms
- 120 tons** of waste reused as products (pallets, wooden and plastic crates)

LOGISTICS AND EFFICIENCY

- 26** sales outlets involved
- +**84%** increase in average press container loads
- 80%** number of press container journeys
- 4732** journeys per year to recover the organic fraction
- 85** agreements with public bodies, mass retailers and municipal agencies

ECONOMIC - ENVIRONMENTAL - SOCIAL IMPACT

- 150 €/ton** to handle the remaining waste
- 3137 TCO_{2eq}**
 - 60** volunteers involved in transportation, preparation and distribution
 - 70** charities benefitting from the food-bank
 - 22** people involved in NOW activities
 - 12** new jobs
 - 4** job placements (Italian Law 382/91)
- 5000** people assisted by the charities drawing on the foodbank

ADVANTAGES AND DISADVANTAGES OF NOW FOR EACH STAKEHOLDER

GDO

AREA

HYGIENE/HEALTH AND SAFETY

ADVANTAGES

- improved general conditions of hygiene/health when collected on a frequent basis
- elimination of risks arising from illegal attempts by the needy to recover unsold products

DISADVANTAGES

- risks linked to food safety
- presence of outsiders in areas of restricted access

AREA

LOGISTICS

ADVANTAGES

- less space needed to store goods/waste for long periods

DISADVANTAGES

- more space required for donations (refrigerated cells, etc.)

AREA

ADMINISTRATION

ADVANTAGES

- prompt control of unsold products

DISADVANTAGES

- more space required for donations (refrigerated cells, etc.)

AREA

FINANCE

ADVANTAGES

- VAT claim-backs for donations
- savings in waste disposal costs
- savings in the form of tax reductions or weighted rates

DISADVANTAGES

- cost of donation scheduling
- increased labour costs to manage logistics
- increased labour costs to manage administration

AREA

APPLICATION OF LOCAL AUTHORITY WASTE MANAGEMENT REGULATIONS

ADVANTAGES

- easier compliance with local authority separated waste collection schemes
- easier compliance with local authority separated waste collection targets

DISADVANTAGES

- none

AREA

SOCIAL AND ENVIRONMENTAL RESPONSIBILITY

ADVANTAGES

- improved performance in separated waste collection schemes
- less waste
- improved overall social/environmental image for marketing purposes
- improved local image for their donations policy
- limitation of complaints and reports

DISADVANTAGES

- none

MUNICIPALITIES AND WASTE COLLECTION AGENCIES

AREA

HYGIENE/HEALTH AND SAFETY

ADVANTAGES

- improved general conditions of hygiene/health in areas around sales outlets
- elimination of risks arising from illegal attempts by the needy to recover unsold products

DISADVANTAGES

- risks linked to food safety for charities
- difficulties in managing hygiene controls and waste selection

AREA

FINANCE

ADVANTAGES

- savings in waste disposal costs
- savings in social benefits in the case of direct donations in the local area
- reduced number of trips to convey waste

DISADVANTAGES

- cost in the event of fees payable or tax benefits

AREA

APPLICATION OF LOCAL AUTHORITY WASTE MANAGEMENT REGULATIONS

ADVANTAGES

- easier compliance with waste collection schemes from local Municipality

DISADVANTAGES

- none

AREA**SOCIAL AND ENVIRONMENTAL RESPONSIBILITY****ADVANTAGES**

- improved performance in separated waste collection schemes
- less waste
- improved overall social/environmental image
- improved local image for their donations policy
- limitation of complaints and reports

DISADVANTAGES

- none

NON-PROFIT COMPANIES RECEIVING THE DONATIONS**AREA****FINANCE****ADVANTAGES**

- savings on products bought for social purposes

DISADVANTAGES

- transport costs (cars, fuel, etc.)
- cost of insuring volunteers

AREA**LOGISTICS****ADVANTAGES**

- possibility to involve operators and volunteers in collection/selection/donation processes

DISADVANTAGES

- need to have appropriate tools to organise the collection/selection/distribution/donation activities

AREA**SOCIAL AND ENVIRONMENTAL RESPONSIBILITY****ADVANTAGES**

- improved local image for their donations policy

DISADVANTAGES

- none

AREA**HYGIENE/HEALTH AND SAFETY****ADVANTAGES**

- none

DISADVANTAGES

- food safety risks for the donation chain

CONCLUSIONS

The NOW model brings together several local stakeholders: private industry in the shape of mass retailers, the public world of the municipalities, municipal agencies and charities. It has made possible an improvement in the efficiency of waste management and integration by means of recovery of surplus products. The result has been a series of positive repercussions - financial, social and environmental - as indicated and quantified in the previous chapter.

In many cases administrative and logistical difficulties and fears linked to health safety have reduced significantly the impact of the stakeholders' donation policies. Administrative and logistical aspects have also led to extra costs for mass retailers without, in many cases, any corresponding reductions in municipal (waste) tax.

There are many variables for the success of the NOW system and it is a particularly complex matter to foresee future developments in this type of process. Success also depends on the various choices made by the mass retailers.

To avoid these problems, changes in the law are now needed to simplify certain procedures, currently burdensome for those involved in this process. From the logistics point of view, the NOW system certainly makes it possible to overcome certain difficulties that the charities would never be able to face if acting on their own.

There is no doubt that the process tested by Cauto has generated many benefits in the local area and has also highlighted several critical aspects of the system which, it is hoped, can be dealt with thanks to collaboration between all those involved in the process.

PHOTO -GALLERY



Distribution of goods to charities c/o CAUTO



Separation of goods c/o CAUTO



Collection of goods c/o Mass Retailers' outlets



Demonstration day for schools
c/o Mass Retailers' outlet



Education activities c/o schools



CAUTO experts and the NOW teaching game
in the classroom

Photographs by Valerio Gardoni

CAUTO

NOW is a project by Cauto with funding from the European Commission's LIFE+ Programme.

Cauto - Cantiere Autolimitazione Onlus is a type B social co-operative set up in 1995 (Italian Law n° 381/1991) with the goal of integrating the socially disadvantaged through work. On the strength of its creativity, research and innovative ideas, Cauto promotes human dignity and job insertion of disadvantaged people in the interests of the community, at the same time helping to reduce waste and protect the environment.

The LIFE+ Programme is a European Commission funding instrument with the aim of integrating and developing the environmental policies and laws in the EU Member States. Its ultimate goal is to support projects that contribute to sustainable development and quality of the environment.



Now Project group photo





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