



CONTARINA SPA Integrated waste management

Marco Mattiello International Relations Manager

Lovadina di Spresiano June 20, 2019



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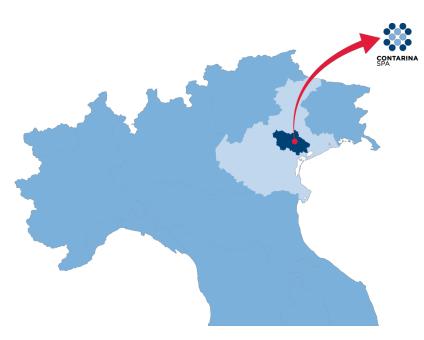
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Our location

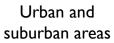
CONTARINA 100% Public Company

1.300
49
~555.000
~260.000
701
83,8 M.€



Historical centers





Rural areas

Remote areas







Shared objectives

















Contarina's territory





-----> No landfills

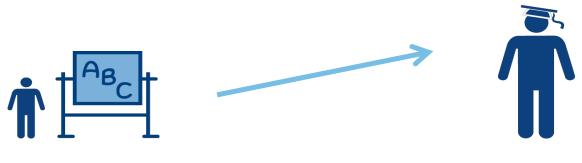




We invest in the future



Lorries and plants





Citizens



Individual Awareness





EcoGiornale

EcoSportelli



EcoCalendario



Open Days



Web site



School Education



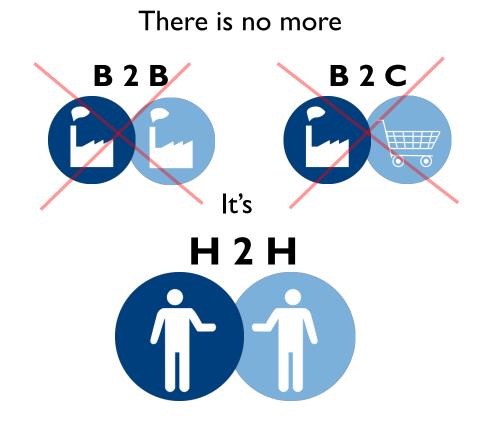
Social media







Our philosophy

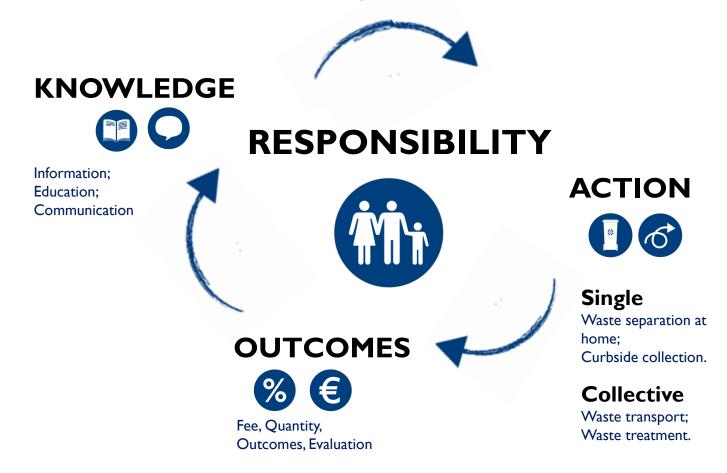






Waste management system

Conceptual model







Curbside collection

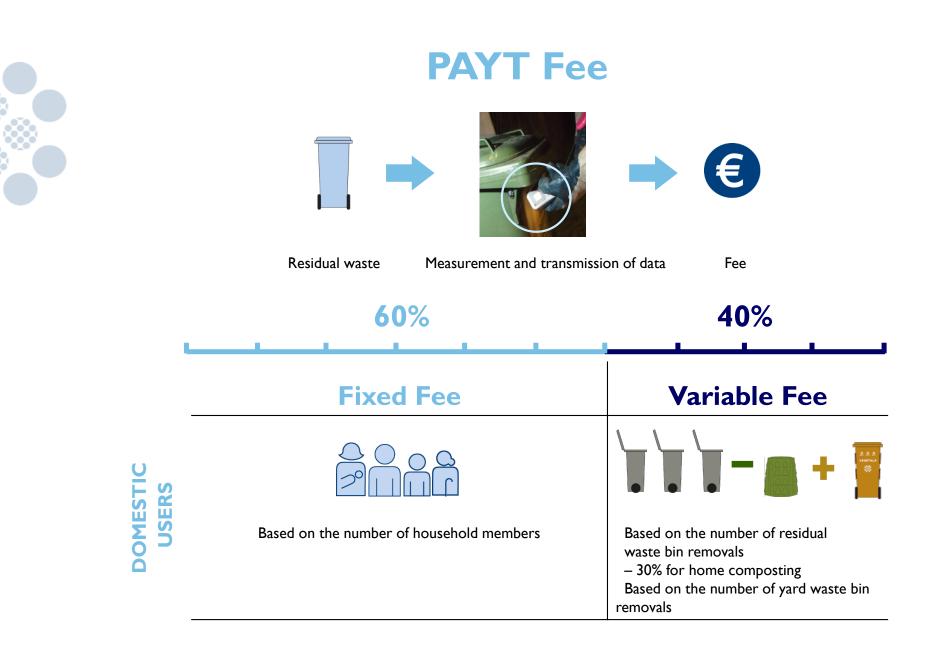
A flexible system



UMIDO

SITTONE VETRO PLASTICA LATTINE CARTA





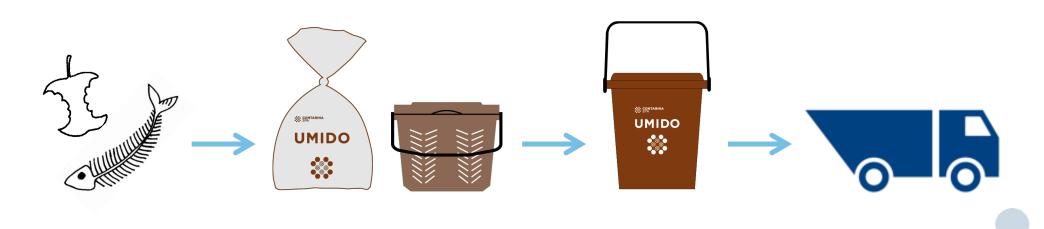


Recycling and Treatment



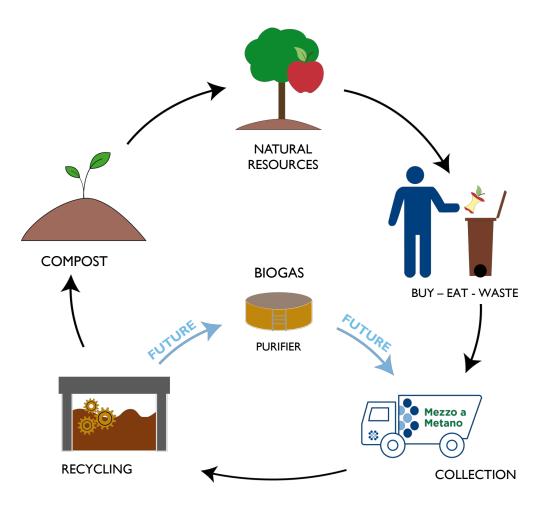


Organic and yard waste





Bio and yard waste







Main features of the new composting plant

- Complete autonomous treatment of organic waste;
- Higher enhancement of waste collected;
- Total investment: 21.400.000 Euros.

Organic and yard waste treated: 73.000 ton/year (45.000 ton of organic waste and 28.000 ton of yard waste).

Compost production: 26.800 ton/year.

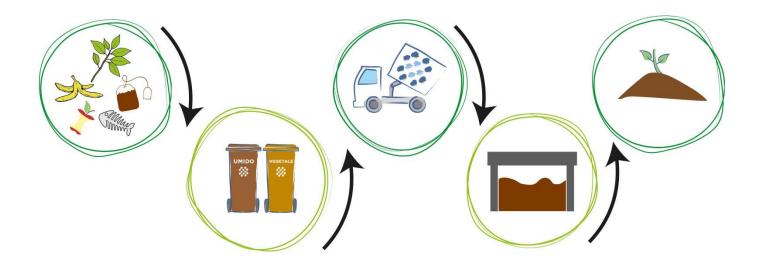






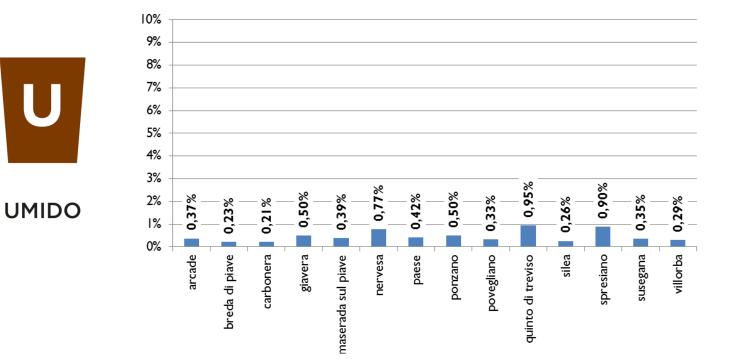
Main features of the new composting plant

- Mitigation in environmental impact thanks to a significant reduction of CO2 and odours emission;
- Improvement of composting process.





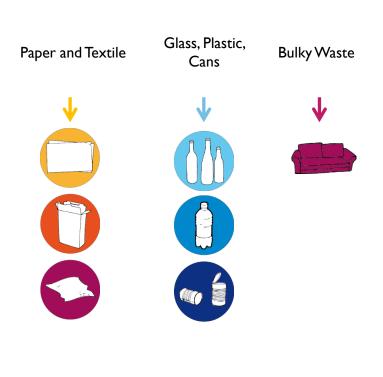
Content of impurities







Pre-selection Plant Recyclables Waste





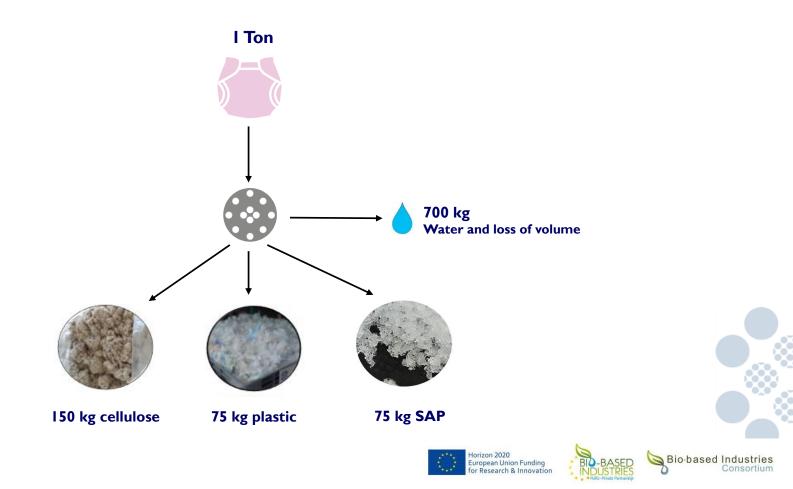






Absorbent Hygiene Products Recycling Plant

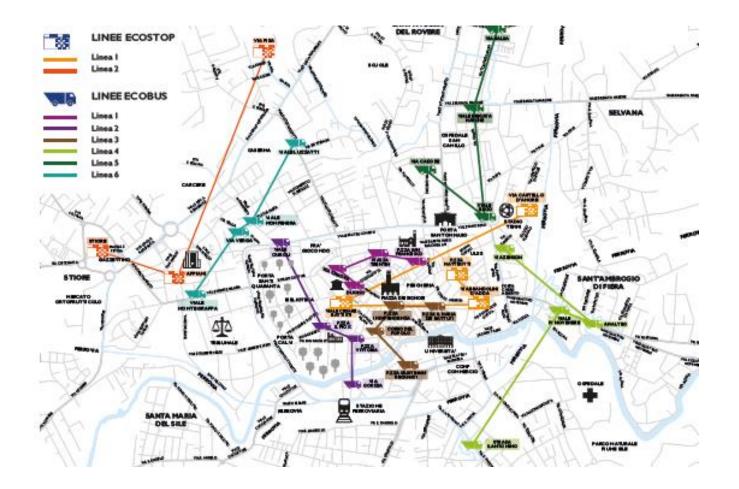








EcoBus and EcoStop







EcoBus

Service created for the historical center of Treviso

- 6 different routes
- It stops for 30 minutes at fixed times
- It collects two different types of waste at the same time
- Users deliver the waste to the EcoBus













Service created for the historical center of Treviso

- -2 different routes
- It stops for I hour at fixed times
- It collects 4 different types of waste at the same time
- Users deliver the waste to the EcoStop



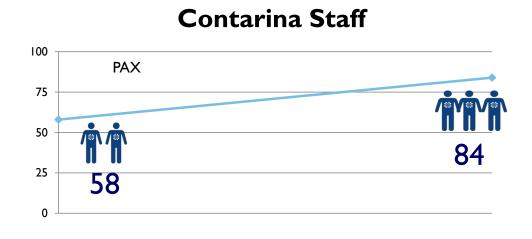








'Green jobs' means growth



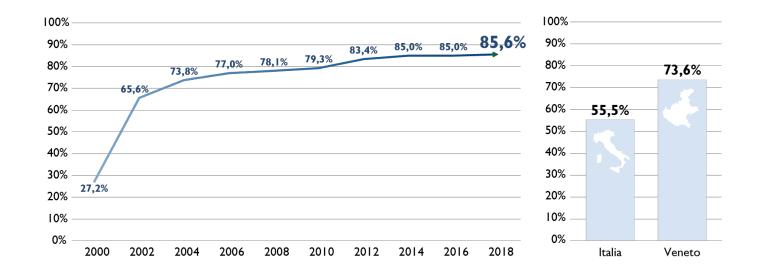
Total costs (management + disposal)







Recycling Rate of the municipalities managed by Contarina

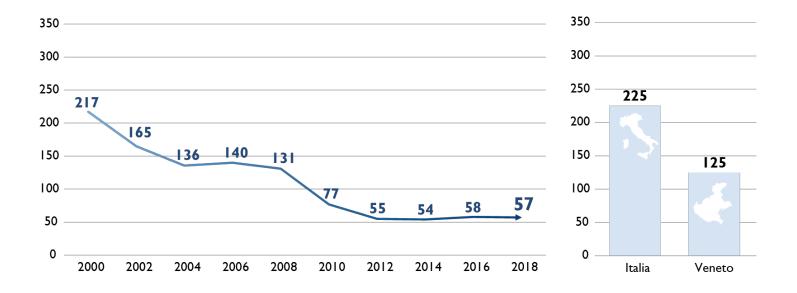




SOURCE Contarina 2018 Rapporto Rifiuti ISPRA 2018 (dati 2017)



The production of municipal residual and bulky waste managed by Contarina (kg*inhabitant/year)

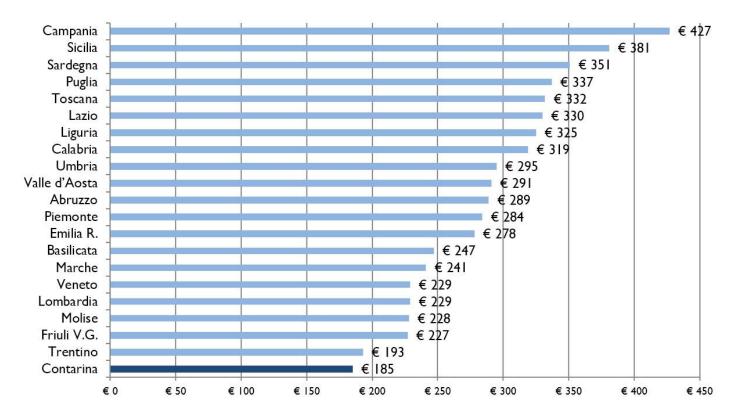






The average household's fee*

Comparison of national data (2016)



*Average household composition: 3 person

SOURCE

Dati Contarina 2017 Cittadinanzattiva - Osservatorio prezzi e tariffe 2016 (Importi comprensivi di IVA e tributo provinciale)



Thank you for your attention



ContarinaSpa

@contarinaspa

ContarinaSpA

www.contarina.it

comunicazione@contarina.it

Christian Garaffa Novamont Italy:

- Collections in Italy continue regularly. Organics, Recycling, Trash
- Quarantined Residents must place all 3 bags in one. Good Citizenry.
- Organics Volumes have decreased slightly because of restaurant and office closings
- Majority of collections are residential so impact is not major
- Yard Waste has decreased more significantly
- Drop off sites are closed and commercial landscaping has stopped
- Milan had a large decrease 29% in organics collections, city with many commercial restaurants
- Plastic recycling collection is down 14%. Perhaps, long term purchasing is larger packing, less SUP
- Same could be said of the decrease in Organics. More processed food for long term.
- Composters remain open majority of customers are farmers, retail operation (small) stopped

Compost Counsil of Canada April 8, 2020

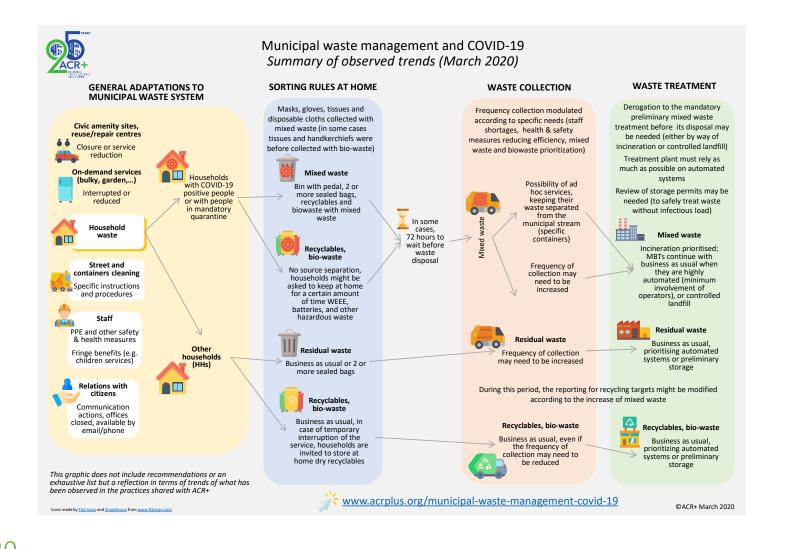
Simona Leroux Novamont France:

- Collections in France continues as usual. Where there is a one man crew with tipping arm
- Outside of the city, where manual 3 man crews are used it depends on local legislation
- Garden Waste pick-up is suspended, this time of year, in city not major impact
 - Residence are asked to build a pile on their property
- Many composters are closing do to lack of garden waste
- Drop off sites are closed and commercial landscaping has decreased
- Organics Food Scrap- collections continue, even if they are landfilled
 - At this point it is decided too difficult to restart the program if it were to stop
- Recycling sites are open, but if the centers close collection will stop also
- If situation is long term, policies will change.

Compost Counsil of Canada April 8, 2020

Simona Leroux Novamont France:

- Quarantined Residents must place all 3 bags in one container
- They should wait 72 hours before putting out collections
- All goes to Incineration



Ireland and UK:

- Concern for workers at sites and pick-up Crews
- CRE Survey for emergency plans done
- Contingency plans
 - From no changes
 - To stop all collections
- Health Survey for Composters
 - Worker readiness
 - Cleaning protocol equipment
 - Covers all aspects with plans

WISH	Waste Industry Safety and Health Forum INFORMATION DOCUMENT				
COVID-19 AND WASTE MANAGEMENT ACTIVITIES					
This information document was produced 2 April 2020 and is based on HM Government advice, industry experience and current knowledge, all of which may change. You should first always follow the latest HM Government advice (<u>httos://www.gov.uk/coronavirus</u>). HM Government advice activity on COVID-19 is being led by the Department of Health and Social Care and PHE (Public Health England) in conjunction with the devolved administrations.					
Please note that it is <u>NOT</u> the intent of this information sheet to provide a general and comprehensive 'one-stop-shop' for advice on COVID-19. The emphasis here is on waste management specific issues. You should also read and understand the freely available HM Government and other advice (such as at the above web address, the further information given in section 6 and the links throughout this document) and use these in conjunction with this document.					
This is a 'live' document and may be updated and revised as further information is released and as the issue develops. If you have a comment on this document please send it to infoltbainformarcus.					

 advice, guidance and resources on COVID-19 are available from various sources, uding graphics on how to wash your hands, symptoms and similar. These are generally to download and use. Use this type of resource as posters, hand-outs for employees and list to reinferom fearure such are cond hunding.

WISH INFO 13 COVID-19 and waste management activities issue 1 2 April 2020 1 of 19

COVID 19 - PRIMARY WASTE ACTIVITY NO. 4 - WASTE COLLECTION STRATEGY

The following risks to waste collection have been identified:

Risk	Discription	Responsibility
Primary Risk	Availability of human resources to maintain normal operations.	Permitted waste collectors
Secondary Risk	Capacity of the sector to cover a collectors list in the event of interruption.	Permitted waste collectors
Tertiary Risk	Outlets for rMSW, MDR, and Food Waste which are dealt with under Disposal recovery and export risk.	Permitted waste collectors, Authorised Facility Ooperators and Exporters

The RWMO's propose three levels to the response as follows

Level	Response	Measures
Level 1	Mitigation Measures	Immediate measures to mitigate the risks identified.
Level 2	Post Mitigation Measures	Additional Measures where mitigation measures are not sustainable
Level 3	Contingency Measures	Further Measures where mitigation and post mitigation measures are threatened.
EVEL 1 - N	IITIGATION MEASURES	
1	Business Continuity	The NWCPO have requested Business Continuity Plans from all 55 Permitted Household Collectors. Continuity measures include, truck allocation, segregated parking, segregat canteens, briefings by phone, staggered start times, cals sanitisation, back office segregation, maintenance team segregation, operations manager segregation, skip and commercial drivers allocated to commercial routes. Industry sources have indicated that normal service can be maintained with up to a 50% reduction in resources. <u>Collection tit</u> restrictions have been removed by the NWCPO on a temporary basis.
2	Top 20 Collectors Coordination (Representing >90% Households)	The top 20 collectors, T20, nationally are coordinating their activities weekly. The T20 have agreed that they will share resources if required, in the event that one collector is disproportionately affected.
3	Civic Amenity Sites	Agreed Messaging: Civic Amenity Sites are a key component of household waste management in Ireland. Customers are encouraged to use Civic Amenity Sites in accordance with HSE guidelines on social distancing. Customers should only use Civic Amenity Sites for essential requirements at this time to ensure that the sites can remain open and functioning effectively.

Compost Counsil of Canada April 8, 2020

NYC and NE:

- NYC drop-off sites suspended
- Could be good for Curbside? right now future OK
- NERC Northeast Recycling Counsil
 - Webinar on Community Composting Part 2
 - Best Practices Health & Safety
 - People Proximity Staffing, drop offs
 - Staggered times
 - Use certified compostable bags
 - Higher Carbon in Recipes





Health & Safety Recommendations

- Close or limit the number of people onsite at any one time
- There may be changes in volunteer/staff availability make a plan!
- Consider changes to your collection/drop off procedures
 - Staggering drop-off times
 - Have people put their scraps directly in the system (training!)
 - Use certified compostable bags
 - Always have plenty of high C materials
- Practice social distancing (6+ feet away from others)
- Mark 6-foot distances around drop-off or other compost system areas
- No handshaking or hugging for greetings

Compost Counsil of Canada April 8, 2020