Our location

CONTARINA
100% Public Company

Square Kms  1.300
Municipalities  49
Inhabitants  ~555.000
Users  ~260.000
Employees  701
Annual turnover  83,8 M. €

2018

Historical centers  Urban and suburban areas  Rural areas  Remote areas
Shared objectives
Contarina’s territory

- No incinerators
- No landfills
We invest in the future

Lorries and plants

Citizens
Individual Awareness

EcoGiornale  EcoSportelli  EcoCalendario

Open Days  School Education  Social media

Web site
Our philosophy

There is no more

B 2 B

B 2 C

It's

H 2 H
Waste management system
Conceptual model

**KNOWLEDGE**
Information; Education; Communication

**RESPONSIBILITY**

**OUTCOMES**
Fee, Quantity, Outcomes, Evaluation

**ACTION**
- Single: Waste separation at home; Curbside collection.
Curbside collection
A flexible system
## PAYT Fee

<table>
<thead>
<tr>
<th>Residual waste</th>
<th>Measurement and transmission of data</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>60%</td>
<td>40%</td>
<td></td>
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</table>

### Fixed Fee

- Based on the number of household members

### Variable Fee

- Based on the number of residual waste bin removals
  - 30% for home composting
  - Based on the number of yard waste bin removals

**DOMESTIC USERS**
Recycling and Treatment

- **RESIDUAL WASTE:** 57 kg
- **ORGANIC:** 86 kg
- **YARD WASTE:** 55 kg
- **PAPER:** 54 kg
- **GLASS CAN PLASTIC:** 76 kg
- **OTHER COLLECTIONS:** 70 kg

- **NON-RECYCLABLE WASTE PLANT**
- **COMPOSTING PLANT**
- **PRE-SELECTION PLANT RECYCLABLES WASTE**

*Source: Contarina 2018*

*Total: 398 kg*inh/yr
Organic and yard waste
Bio and yard waste

- Natural resources
- Buy – Eat – Waste
- Recyclign
- Compost
- Bio and yard waste
- Purifier
- Biogas
- Collection
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

- Paper and Textile
- Glass, Plastic, Cans
- Bulky Waste
Absorbent Hygiene Products Recycling Plant

1 Ton

- 700 kg Water and loss of volume
- 150 kg cellulose
- 75 kg plastic
- 75 kg SAP
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
EcoStop
Service created for the historical center of Treviso

- 2 different routes
- It stops for 1 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

Contarina Staff

Total costs (management + disposal)

Waste quality
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)

SOURCE
Contarina 2018
Rapporto Rifiuti ISPRA 2018 (dati 2017)
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

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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
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.
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

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

The following risks to waste collection have been identified:

<table>
<thead>
<tr>
<th>Risk</th>
<th>Description</th>
<th>Responsibility</th>
</tr>
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<tr>
<td>Risk 1</td>
<td>Lack of staff to cover - 1 calender day to the month</td>
<td>Local Council</td>
</tr>
<tr>
<td>Risk 2</td>
<td>Lack of staff to cover - 2 calendar days to the month</td>
<td>Local Council</td>
</tr>
<tr>
<td>Risk 3</td>
<td>Lack of staff to cover - 3 calendar days to the month</td>
<td>Local Council</td>
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The WISH (Waste Industry Safety and Health Forum) has developed a number of measures which can be implemented to mitigate the risks associated with waste collection during the COVID-19 pandemic. These measures include:

1. **Business Continuity**
   - The WISH guidance recommends that businesses should continue to operate as normal, with contingency plans in place to deal with any potential disruptions.
   - Staff should be encouraged to work from home where possible, and to maintain social distancing.

2. **Top 10 Collectors Coordination**
   - The WISH guidance recommends that collectors should coordinate their activities to ensure that waste is collected efficiently.
   - This includes coordinating collection times to minimize contact between collectors.

3. **Civic Amenity Sites**
   - The WISH guidance recommends that civic amenity sites should be closed to the public.
   - Staff should be encouraged to work from home where possible, and to maintain social distancing.

These measures are designed to reduce the risk of transmission of COVID-19 and to ensure the continued functioning of waste collection services.

*Note: The information in this document is subject to change and should be treated as a general guide only. It is recommended that further guidance is sought from local authorities and health officials.*
NYC and NE:

- NYC drop-off sites suspended
- Could be good for Curbside? – right now future OK
- NERC – Northeast Recycling Council
  - 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
  - Stagger 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