Ten Steps To Zero Waste

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“Even if we made incineration safe we would never make it sensible. It simply does not make sense to spend so much money destroying resources we should be sharing with the future.” (PC)
TEN STEPS To ZERO WASTE
Waste Reduction Initiatives

Source Separation

Door to Door Collection

Composting

Reuse, Repair & Community Center

Waste Reduction Initiatives

Residual Separation & Research Center

Better Industrial Design

Economic Incentives

Temporary Landfill 2020
1) Source Separation and
2) Door-to-Door collection

The San Francisco system
Hernani en Europa
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<th></th>
<th>lunes</th>
<th>martes</th>
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<th>jueves</th>
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<td>orgánico</td>
<td>rechazo</td>
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Calidad del compost

Pureza del 99,76 %
3) Composting
4) Recycling
5) Reuse, Repair & Deconstruction

In Berkeley, California

(URBAN ORE)
Urban Ore, Berkeley, California operating for 30 years

- Grossing $3 million per year
- 27 full-time well-paid jobs
5) Reuse, Repair & Deconstruction

In Burlington, Vermont
(RECYCLE NORTH)
6) Waste reduction initiatives

- The Irish government put a 15 cent tax on plastic shopping bags
- reduced use by 92% in one year!
Italy

- Several supermarket chains are providing dispensers which allow customers to refill shampoo and detergent bottles...
- As well as wine, water and milk
Effecorta, a food store in Capannori, Tuscany, has 60 taps for liquids for refillable containers.
TAP WATER INSTEAD OF BOTTLED WATER

GLASS INSTEAD OF PLASTIC BOTTLES
REUSABLE PAMPERS

ecobimbi
Pannolino Ecologico Lavabile
7. Economic Incentives
“Pay as you throw” system

1  free
2  free

The more you make, the more you pay!
Step 8.
Step 8 is the most important step to get close to Zero Waste
Step 8 completely avoids incineration
Step 8 makes the residual fraction very visible
8. Residual Separation & Research Facility
RESIDUAL SEPARATION & RESEARCH FACILITY

■ 1. Built at entrance to landfill
■ 2. No material can enter landfill without it being separated and screened
■ 3. More material recycled
■ 4. Toxics removed and identified
■ 5. Dirty organics biologically stabilized
■ 6. Non-recyclable materials STUDIED
This type of facility is currently running in NOVA SCOTIA, Canada.
NON-RECYCABLE MATERIALS

Local University

Or

Technical College

ZERO WASTE RESEARCH CENTER
The Message to Industry:

- If we can’t reuse it, recycle it or compost it,
- Industry shouldn’t be making it
- We need better industrial design for the 21st Century
9. Better Industrial Design
10. An interim landfill for biologically stabilized dirty organic fraction and non-recyclable fraction
Waste Reduction Initiatives

- Source Separation
- Door to Door Collection
- Recyling
- Reuse, Repair & Community Center
- Composting
- Waste Reduction Initiatives
- Economic Incentives
- Residual Separation & Research Center
- Better Industrial Design

Temporary Landfill 2020
San Francisco

- Population = 850,000
- Very little space
- 78% waste diverted by 2011
- ZERO WASTE by 2020 (or very close!)
Italy

- Over 200 communities achieving over 70% diversion -
- and some very quickly
Italy

- **Novara** - (a city near Turin, population = 100,000) achieved 70% diversion in just 18 months!
Italy

- **Salerno** (near Naples, pop 145,000) 18% to 72% in one year!
Italy

- Villafranco d’Asti (Piedmont, population = 3,000) has reached 85% diversion
Spain

- Usurbil in Basque Country
- Has gone from 28% to 86% in 7 months
ZERO WASTE IS A NEW DIRECTION
NO to INCINERATORS

NO to LANDFILLS

THE BACK END OF WASTE DISPOSAL
NO to INCINERATORS
NO to LANDFILLS
THE FRONT END
OF WASTE
DISPOSAL
THE BACK END
OF INDUSTRIAL DESIGN
Waste Reduction Initiatives

- Source Separation
- Recycling
- Economic Incentives
- Door to Door Collection
- Reuse, Repair & Community Center
- Residual Separation & Research Center
- Composting
- Waste Reduction Initiatives
- Better Industrial Design

Temporary Landfill 2020
Conclusions

- We do not need mega-landfills or incinerators!
- There is a better alternative
- The ZERO WASTE strategy is
  - Better for our health (LESS TOXICS)
  - Better for the economy (MORE JOBS),
  - Better for our children (MORE HOPE), and
  - Better for the planet (MORE SUSTAINABLE)!
Zero Waste 2020

- Sustainable Agriculture
- Sustainable Energy
- Sustainable Industries & Jobs
- Sustainable Community Development
- Sustainable Economic Development
- Sustainable Architecture
- Education For Sustainability
Rifiuti Zero
2020

Better Industrial Design

Sustainable Agriculture
Sustainable Community Development
Sustainable Economic Development
Sustainable Energy
Sustainable Architecture

Education For Sustainability
Sustainable Industries & Jobs
Rifiuti Zero 2020

- Sustainable Agriculture
- Sustainable Community development
- Sustainable Economic development
- Sustainable Energy
- Sustainable Architecture
- Sustainable industries & Jobs
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- Composting
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Rifiuti Zero 2020

Education for Sustainability

Sustainable Agriculture

Sustainable Industries & Jobs

Sustainable Community Development

Sustainable Economic Development

Sustainable Energy

Sustainable Architecture

Composting

Research Center

Better Industrial Design
Rifiuti Zero 2020

- Sustainable Agriculture
- Education For Sustainability
- Sustainable Architecture
- Sustainable Energy
- Sustainable industries & Jobs
- Sustainable Community development
- Deconstruction

NO INCINERATION

Better Industrial Design

Composting
Rifiuti Zero 2020

Education for Sustainability

Sustainable Agriculture

Sustainable Community Development

Sustainable Economic Development

Sustainable Industries & Jobs

Sustainable Architecture

Deconstruction

Research Center

Composting

100's of “green boxes”

Better Industrial Design

NO INCINERATION

Sustainable Energy
Rifiuti Zero 2020

Composting

Research Center
Education For Sustainability
Deconstruction
Sustainable Architecture
Sustainable Energy
NO INCINERATION

Sustainable Agriculture
Sustainable Community development
Sustainable Economic development

Reuse & Repair Centers

100’s of “green boxes”

Better Industrial Design
Sustainable industries & Jobs

100’s of “green boxes”