

WEEE RECYCLING EXPERIENCE AT BOLLATE PRISON



25 gennaio 2017



LEGISLATIONS AND TARGETS

Directive 2012/92/EU



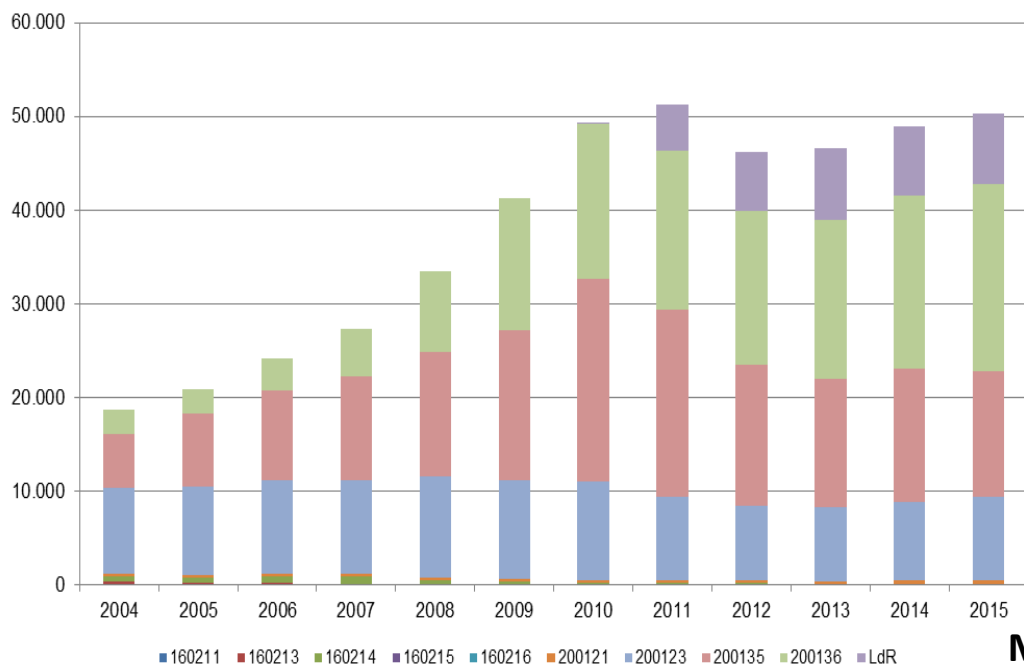
Legislative Decree nr. 49/2014



Collection targets (household WEEE):

- Until 31/12/2015: 4 kg/inhab*y
- 01/01/2016: 45% of the released to the market during the previous 3 years (weight)
- 01/01/2019: 65% of the released to the market during the previous 3 years (weight) or 85% of WEEE produced

COLLECTION DATA - LOMBARDY



160211*: discarded equipment containing chlorofluorocarbons, HCFC, HFC
 160213*: discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
 160214: discarded equipment other than those mentioned in 16 02 09 to 16 02 13
 160215*: hazardous components removed from discarded equipment
 160216: components removed from discarded equipment other than those mentioned in 16 02 15
 200121*: fluorescent tubes and other mercury-containing waste
 200123*: discarded equipment containing chlorofluorocarbons
 200135*: discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
 200136: discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
LdR=WEEE collected at «Grouping places» (CDC RAEE data)

Collected WEEE, 2015: 42.765,3 t (by local Authorities) + 7.572,7 (by Grouping places) = 50.388,0 t



5,03 kg/inhab*y (ARPA data)
 (national rate: 3,7 kg/inhab*y, ISPRA data;
 4,1 kg/inhab*y CDC RAEE data)

MAIN PLANTS IN LOMBARDY REGION

Impianto	Comune	Prov
Relight	Rho	MI
S.E.VAL.	Colico	LC
Elettro Recycling	Cavenago di Brianza	MB
Stena S.I.A.T.	Castenedolo	BS
Nuova Beretta	Bollate	MI
Il Trasporto	Calco	LC
S.E.Val.	Piantedo	SO
S.Ec.Am.	Cedrasco	SO



EUROPEAN TARGET

EUROPEAN TARGET 01/01/2016: 45%

ITALIAN DATA (2015):

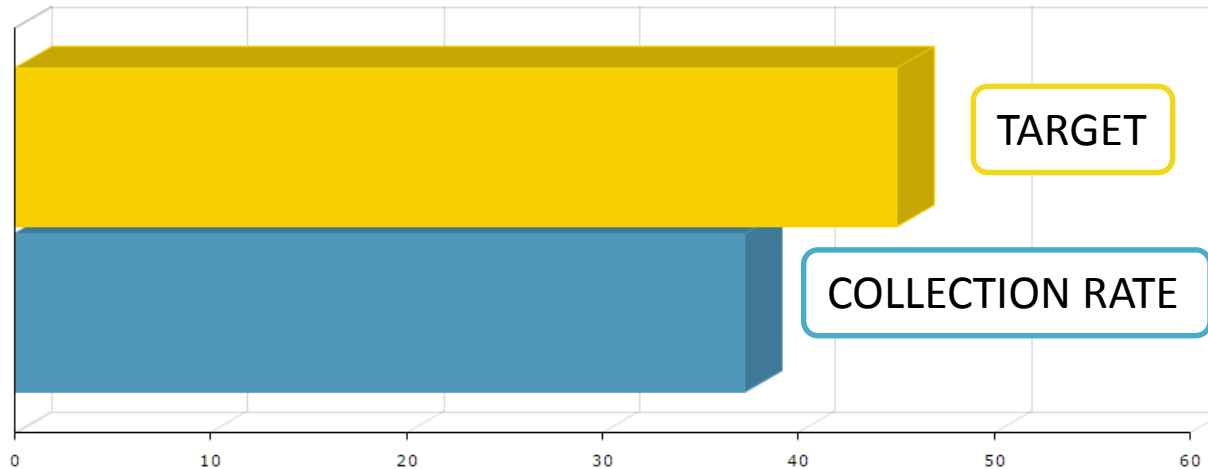
Released to the market during the previous 3 years:

2.595.962 ton

Average Value: 865.017 ton

Collected in 2015: 322.090 ton

Collection rate: 37,23%



(CDC RAEE data)



WEEE TREATMENT FACILITIES



= recyclable



IRON
GLASS
PLASTICS
COPPER
ALUMINUM
PRECIOUS METALS
RARE EARTH ELEMENTS

Specific treatment based on the characteristics of the WEEE

Selective disassembly



WEEE contains also POLLUTANTS

WEEE that are not tracked by authorised facilities strengthen the illegal traffic of waste. An estimate of generated WEEE puts this traffic at about 500,000 ton

WEEE RECYCLING EXPERIENCE AT BOLLATE PRISON

Project starts on March 30, 2010

The project partners:

- Regione Lombardia - DG Ambiente Energia e Sviluppo Sostenibile
- Provveditorato dell'Amministrazione Penitenziaria Regionale per la Lombardia (P.R.A.P.)
- AMSA S.p.A.



WEEE RECYCLING PLANT - HISTORY

March 2010

- Memorandum of Understanding

October 2011

- AMSA submits the project for authorization to Provincia di Milano

November 2011

- Prison Administration identifies a new area

July 2012

- AMSA submits a new project o Provincia di Milano

October 2012

- Provincia di Milano gives the authorization

October 2013

- Provveditorato alle OO.PP.: tender to rely jobs

January 2014

- Delivery of work

October 2014

- Problems with the first contractor e new delivery of work

June 2016

- Administrative and technical testing

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DELAYS!

Testing was originally planned in January 2012



Regione
Lombardia

WEEE RECYCLING PLANT – THE PROJECT

Technological innovation
and energy saving:
solar panels

Weighbridge
and CCTV

Surface: 3.000 mq
Treatment capacity: 3.000
ton/year

- 3 treatment processes:
- R2 Large Appliances
 - R3 TVs e Monitors
 - R4 Small Household Appliances

Work within the prison
with job prospects outside



WEEE RECYCLING PLANT - FUNDING

REGIONE LOMBARDIA

- Shed construction 2.000.000 €

Provveditorato dell'Amministrazione Penitenziaria

- Complementary works 100.000 €

AMSA S.p.A.

- Electromechanics and training 800.000 €