

Prevenzione, RD e riciclo in una strategia virtuosa

***verso lo "zero"
e il ruolo centrale della analisi del RUR***

Enzo Favoino



Scuola Agraria del Parco di Monza

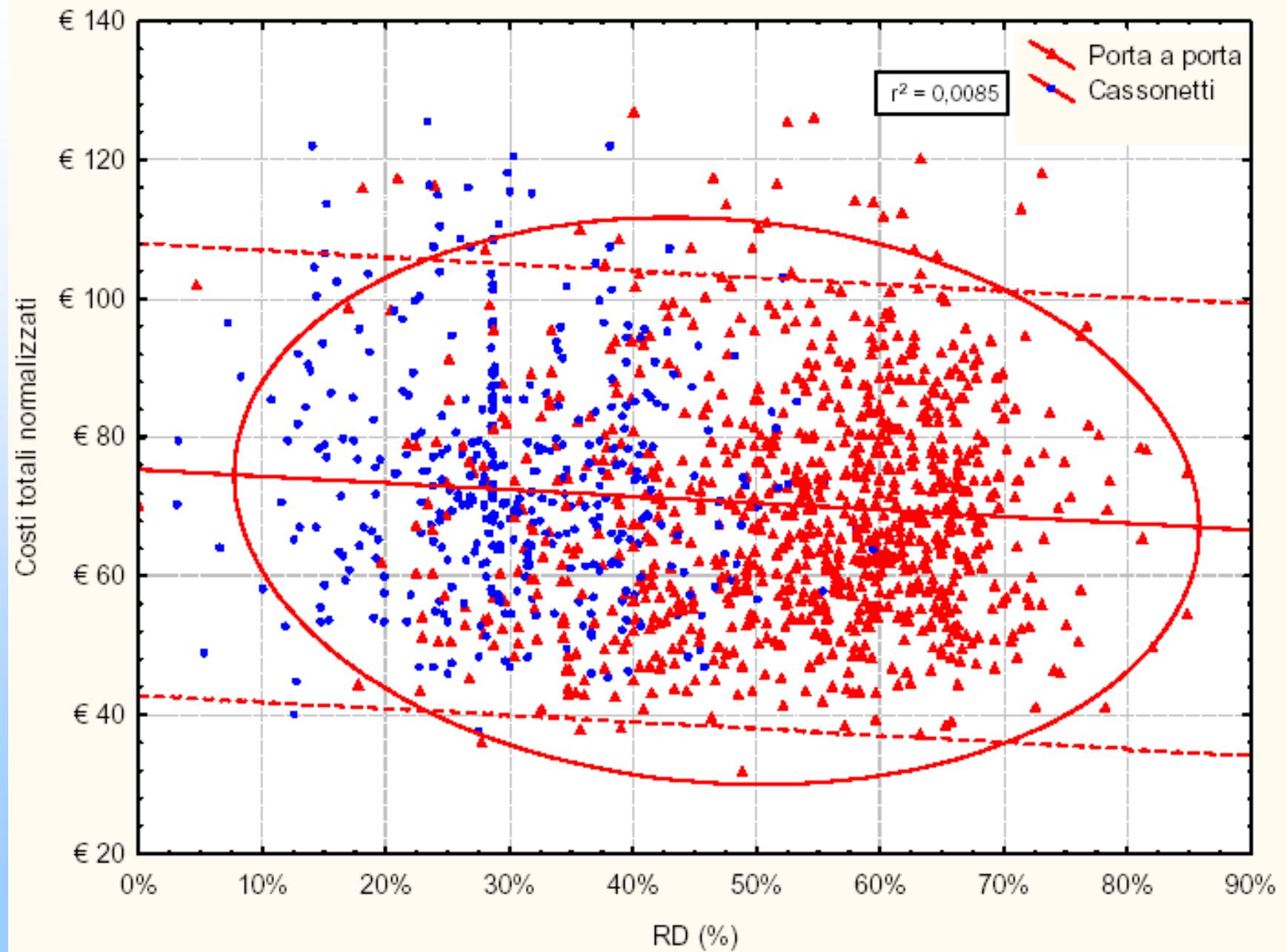


Osservatorio "Verso Rifiuti Zero", Capannori



Valutazioni economiche

	Anno x: sistema a cassonetti stradali	Anno x+1: sistema di raccolta porta a porta	Variazione anno x / anno x+1
Abitanti	10.000	10.300	+3,0%
Costi totali (raccolta e smalt/tratt)	€ 900.000,00	€ 850.000,00	-5,6%
Produzione totale di rifiuti (kg/abitante.anno)	550	470	-14,5%
% raccolta differenziata	32%	65%	+103,1%
Costo totale (€/ton)	163,64	175,58	+7,3%
Costo totale (€/abitante.anno)	90,00	82,52	-8,3%





Il valore dell'analisi del RUR

	Prov. Lucca	Capannori	
Categorie merceologiche	% (peso/peso)	% (peso/peso)	
Materiale organico da cucina;	25,12%	14,84%	20%
Materiale organico da giardino;	9,16%	4,36%	2,97%
Giornali (quotidiani e riviste);	5,09%	0,95%	0,87%
Cartone ondulato;	6,12%	0,06%	0,19%
Cartone teso;	2,49%	0,27%	0,01%
Imballaggi cellulosici poliaccoppiati;	0,98%	1,46%	0,05%
Altra carta (non imballaggio e non giornali e riviste);	5,68%	9,77%	0,29%
Imballaggi flessibili in alluminio;	0,28%	1,07%	1,95%
Imballaggi rigidi in alluminio;	1,00%	0,00%	0,21%
Imballaggi in acciaio;	1,20%	9,35%	0,00%
vetro;	2,11%	1,26%	1,87%
Imballaggi flessibili in plastica;	8,76%	1,60%	0,25%
Imballaggi rigidi in plastica (bottiglie e	2,08%	0,61%	0,32%
Imballaggi rigidi in plastica (non	1,96%	1,17%	0,12%
bottiglie e flaconi);			
Imballaggi poliaccoppiati in plastica;	0,64%	1,91%	1,59%
Altra plastica: sacchi neri;	4,83%	0,61%	0,38%
Altra plastica: non imballo;	2,88%	8,05%	0,12%
Imballaggi in legno;	0,72%	5,75%	1,61%
Tessili e cuoio;	9,08%	17,30%	1,15%
Materiali inerti,	0,22%	2,64%	3,46%
Pannolini;	6,07%	13,65%	0,53%
RUP;	0,30%	0,30%	2,73%
Sottovaglio < 20mm.	3,25%	3,05%	0,06%
TOTALE	100%	100%	0,61%
			20,00%

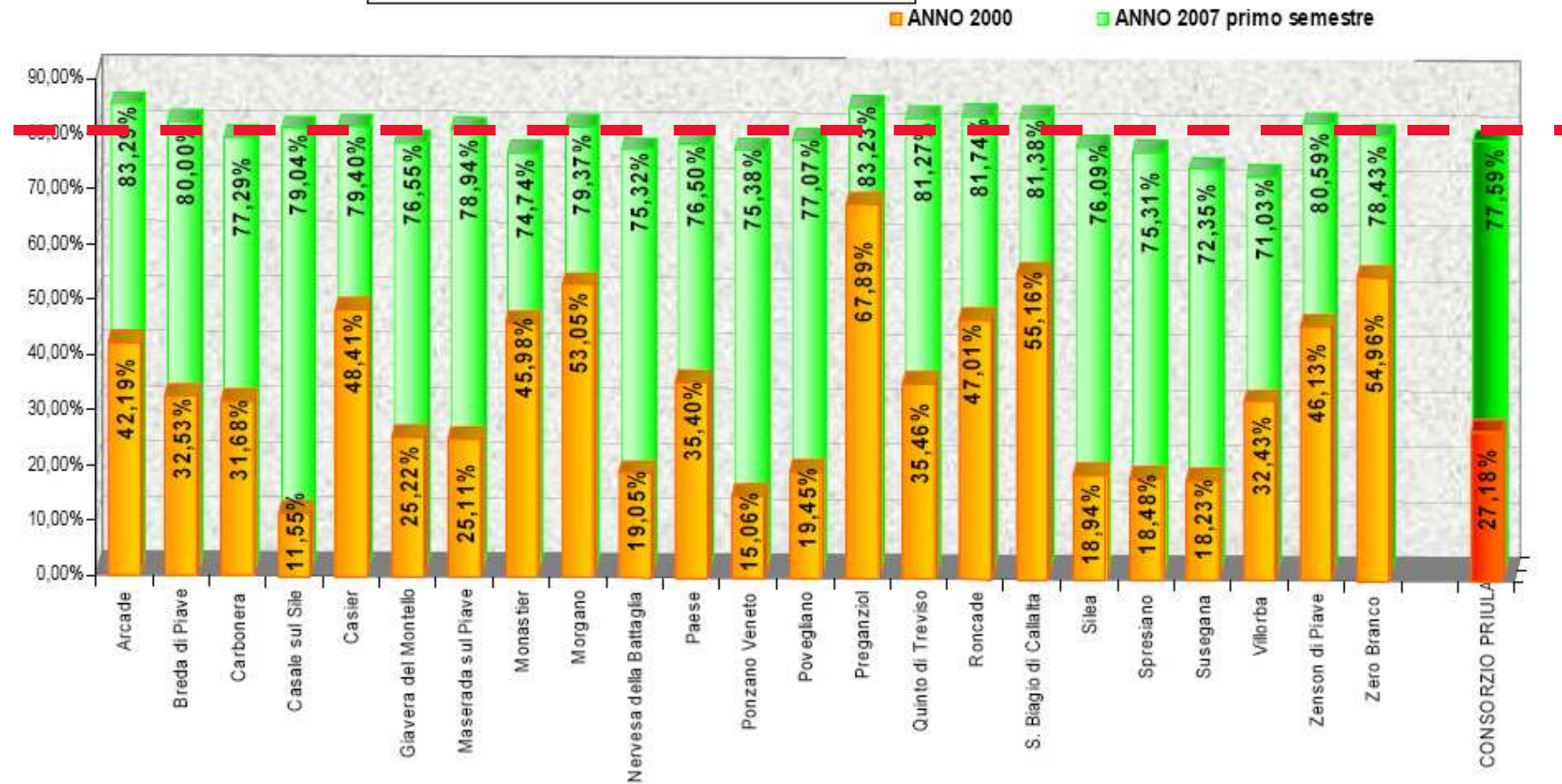
159%





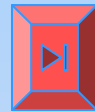
I risultati - 1

% RD ANNO 2007 (primo semestre) VS ANNO 2000

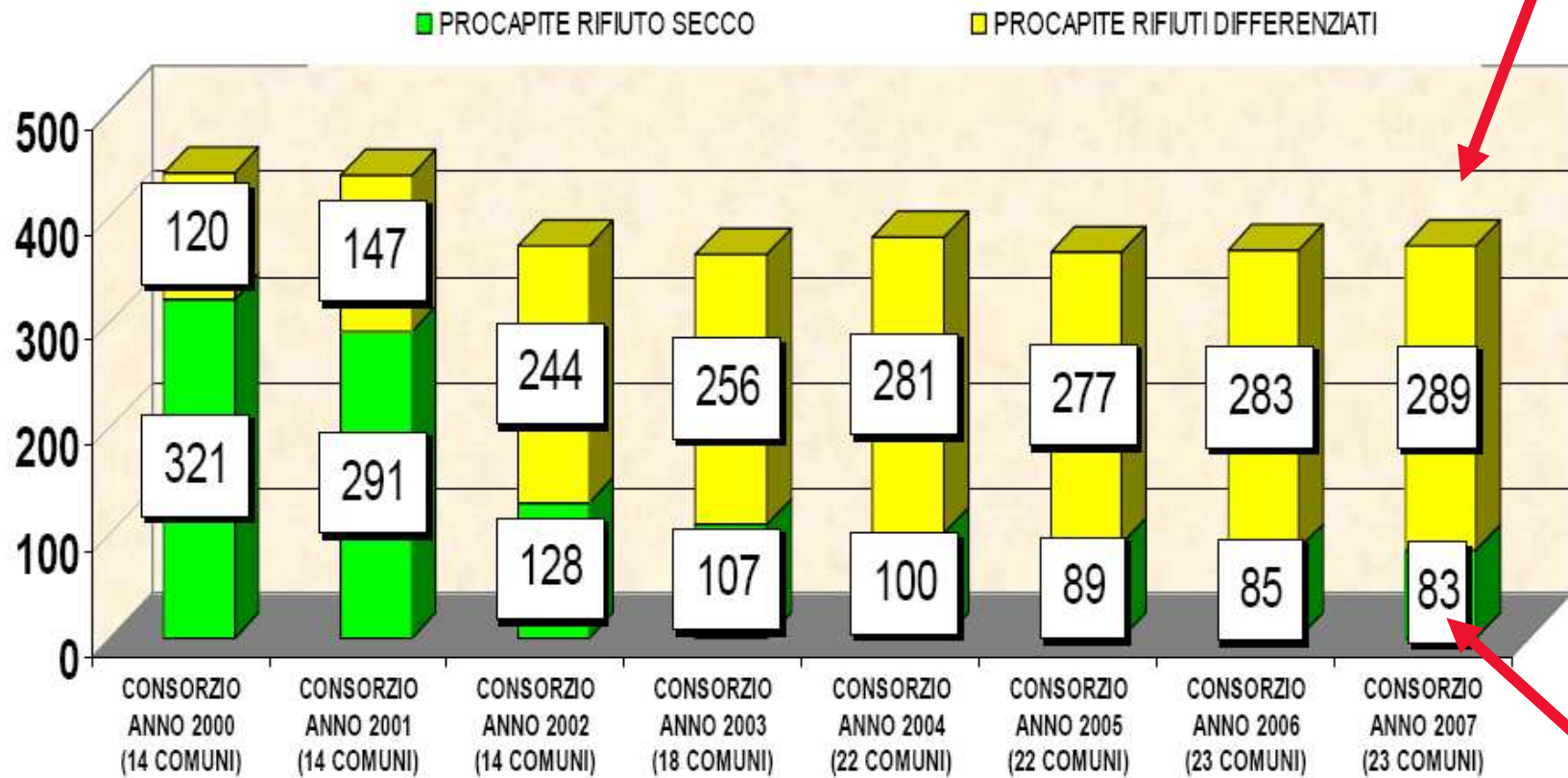




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I RISULTATI QUANTITATIVI (kg/abitante*anno)





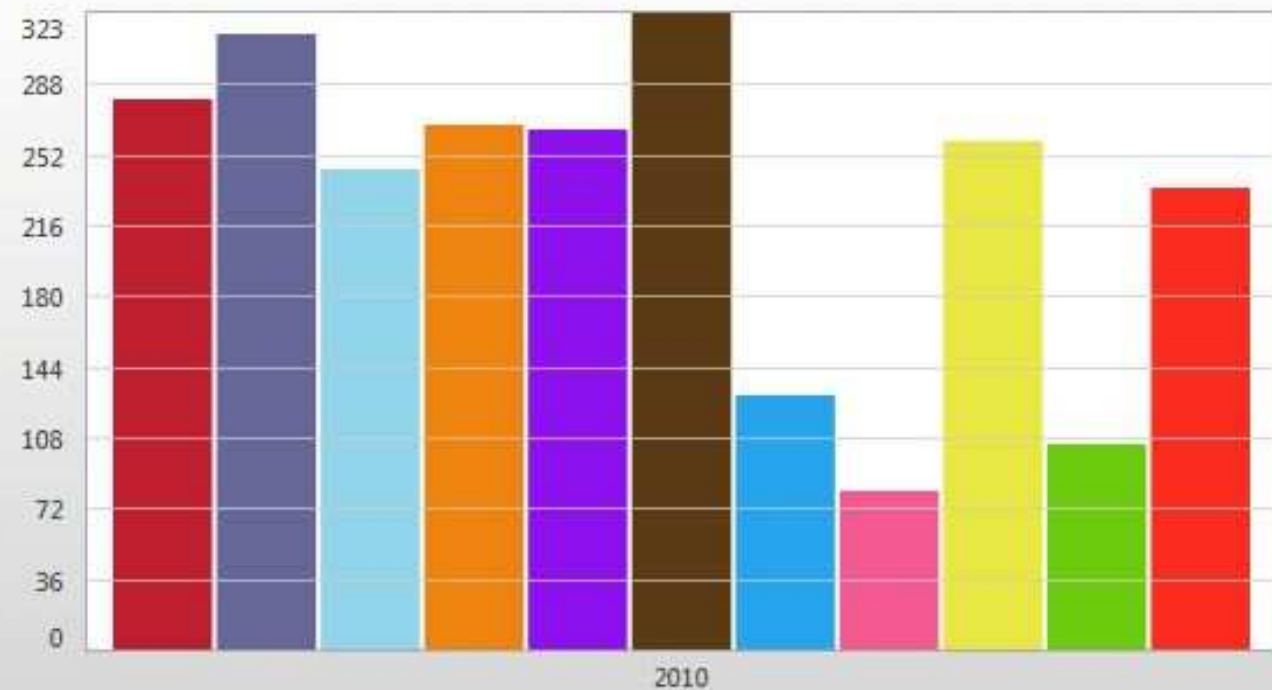
Usurbil / Hernani

Rechazo 2010 (Kg/hab año)

Municipio	2010
MSM	279,50
Donostia	312,47
Errenteria	244,60
Pasaia	266,19
Lezo	264,49
Astigarraga	323,42
Oiartzun	129,48
Usurbil	81,44
Urnieta	258,95
Hernani	104,14
Lasarte-Oria	234,44

Nota: Datos de 2010 reales de enero a agosto y prorrateo de la media hasta final de año. En Hernani y Oiartzun el prorrateo hasta final de año se realiza con los datos de junio, primer mes completo con puerta a puerta.

Rechazo 2010 (Kg/hab año)



■ MSM
 ■ Donostia
 ■ Errenteria
 ■ Pasaia
 ■ Lezo
 ■ Astigarraga
 ■ Oiartzun
■ Usurbil
 ■ Urnieta
 ■ Hernani
 ■ Lasarte-Oria



CONDITIONS TO BECOME A ZERO WASTE MUNICIPALITY

- Adopt the definition of ZWIA and commit to apply the principles towards ZW.
- Have or commit to a draft plan on how to achieve Zero Waste.
- Establish benchmarks and a timeline to minimize residual waste which should include: less than 100kg in next 5 years and less than 50kg in next 10 years (per capita).
- Work with a Residual Separation and Research Facility (RSRF),
- Engage the community and the informal sector to innovate and promote Zero Waste,
- Commit to educate and train professionals, policy makers and citizens into Zero Waste,
- Commit to implement green procurement policies and expand Zero Waste infrastructure,
- Support and promote Zero Waste procurement policies and programs for companies,
- Commitment to promote the results and share best practices with other municipalities and the ZW network,
- Commit to report progress to the rest of the network on a yearly basis.
- Note to 3: To apply the municipality must be generating less than 30% of total MSW (in weight) of residual waste.
- Note to 4: If the municipality doesn't have the competence to establish a RSRF it should commit to make efforts in order to have it established in their District, and that pending, make at least two compositional analyses a year in order to have a first-hand feedback on results of variable charging schemes, prevention and separate collection.



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...tirando le somme...

- 70% RD – FATTO
- Stabilizzazione o riduzione dei quantitativi – FATTO
- Ulteriore riduzione degli impatti delle discariche mediante pretrattamento a freddo (TMB) – FATTO, ulteriore 20% perdite di processo
- Ulteriore recupero di materia dal RUR (selezioni ottiche, densimetriche, estrusioni, ecc.) – FATTO, ulteriore 30-35% di recupero
- Solo 40 % (ca.) del RUR a discarica, come materiale "stabilizzato" – 12 % del RU!!
-non siamo "damn close to Zero" ?!?......



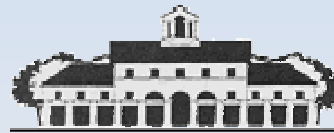
Il paradigma della sostenibilità (nuova campagna EC su comportamenti quotidiani e lotta al cambiamento climatico)

"turn off, switch off, recycle and walk"



Grazie

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