

WASTE INCINERATION IN CEMENT KILNS

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Zero Waste Europe/GAIA

Barletta, 8th November 2014



A local and
global problem



gaia
Global Alliance for
Incinerator Alternatives

Global Anti-Incinerator Alliance

GAIA: INTERNATIONAL ALLIANCE FOUNDED IN 2000 TO END ALL FORMS OF WASTE INCINERATION AND PROMOTE ZERO WASTE ALTERNATIVES



Our ultimate vision is a just, toxic-free world, and an economy where all products are reused, repaired or recycled back into the marketplace or nature.



**GAIA: ALLIANCE OF MORE THAN 800 MEMBERS IN 90 COUNTRIES.
WHAT WE DO: SUPPORT TO GRASSROOTS COMMUNITIES, STRATEGIC ALLIANCES GLOBAL CAMPAIGNS AND PROMOTION OF ZERO WASTE SOLUTIONS FOR LOCAL DEVELOPMENT.**



Detroit, US, 2010, Photo by the Ruckus Society

WASTE: THE TOP OF THE ICEBERG



THE #AGEOFDECOMMISSIONING (INCINERATORS)



ZERO WASTE IS HAPPENING!





Working Together Towards
Zero Waste ALAMINOS

PROVINOV ZAZIVA!

eco-cycle
GREEN STAR SCHOOLS

PLASTIC BAGS STOP IN ME!
PLASTIC BAGS STOP IN ME!

INCINERATION MARKS
BURN NOT.

recykluj
recykluj

gaia

STITCHING CONTINENTAL
THANAL

ZERO WASTE is POSSIBLE

ARMIKA
RECYKLUJ

RECYKLUJ

We're Composting With
eco-cycle
303-444-6634

WE are for Zero Waste
Waste Coalition

RECYKLUJ

RECYKLUJ

NOW WASTE ENDS UP...IN CEMENT KILNS



- Amount of waste being burnt in cement kilns has increased x5 times, and it's expected to continue rising.
- Globally: 37% of the fuel being burnt in cement kilns by 2015
- In Europe, it's expected to be 60%.
- Cement kilns burning this waste can receive exemptions from regulations *and* financial benefits for waste burning, and can add fossil fuel and hazardous waste to the mix without penalty.

REFUSE-DERIVED FUEL (RDF) MARKET EXPANDING

- Residual waste generation feeds the production of RDF
 - Europe: 49% of RDF is made of MSW.
- RDF market growth:
 - Spain consumption of RDF
 - 0 en 2007 a 111.794 tonnes in 2011.
 - UK: triples exports in 2013, mostly for incinerators in North Europe.
- Source: Puig, Fabra, Calaf, *La puerta de atrás de la incineración de residuos*, 2012.
- Source: <http://www.letsrecycle.com/news/latest-news/energy/rdf-exports-top-1.5m-tonnes-in-2013>



RDF IS MADE OF REUSABLE AND RECYCLABLE MATERIALS

- RDF: 31 % plastic, 13 % paper and cardboard, 12 % wood, 14 % textiles and 30% other materiales.

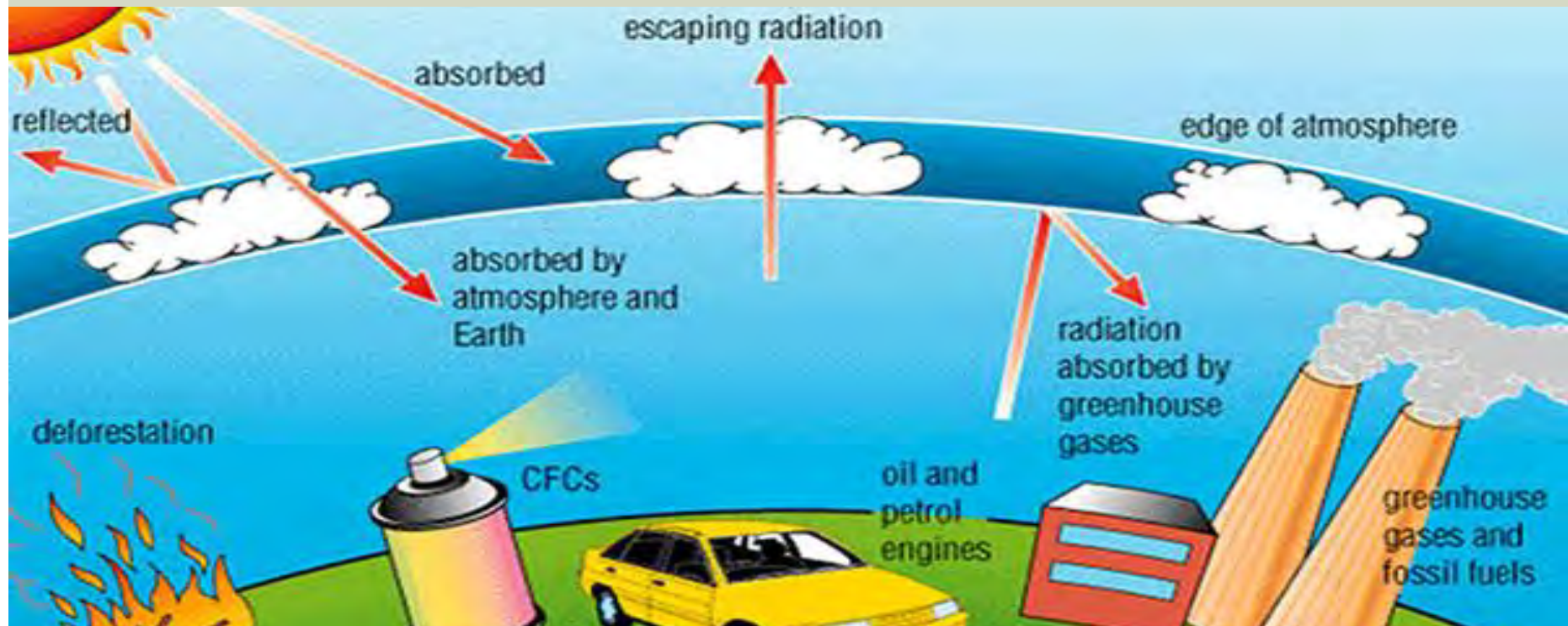
- Source: Puig, Fabra, Calaf, *La puerta de atrás de la incineración de residuos*, 2012.

- Materials that end up RDF could be reused, recycled, or the products should be redesigned to do so."



EMISSIONS AND CLIMATE CHANGE

1. The cement kiln industry emits around 4-6% of global human related carbon emission.
2. Within the 90 companies responsible for 2/3 of historical GHG emissions – Cemex, Holcim, Lafarge, Heidelberg...
 - Carbon Majors – www.carbonmajors.org. *Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854-2010: Climatic Change*, online 21 November 2013.



BURNING WASTE = CLIMATE-FRIENDLY?

- There is no such thing as sustainable biomass or waste for industrial purposes
- It's not only increasing GHG emissions, but releasing very toxic substances into the atmosphere.
- Burning materials for which there are alternatives for treatment.
- Yet, it receives climate financial benefits from the carbon market.



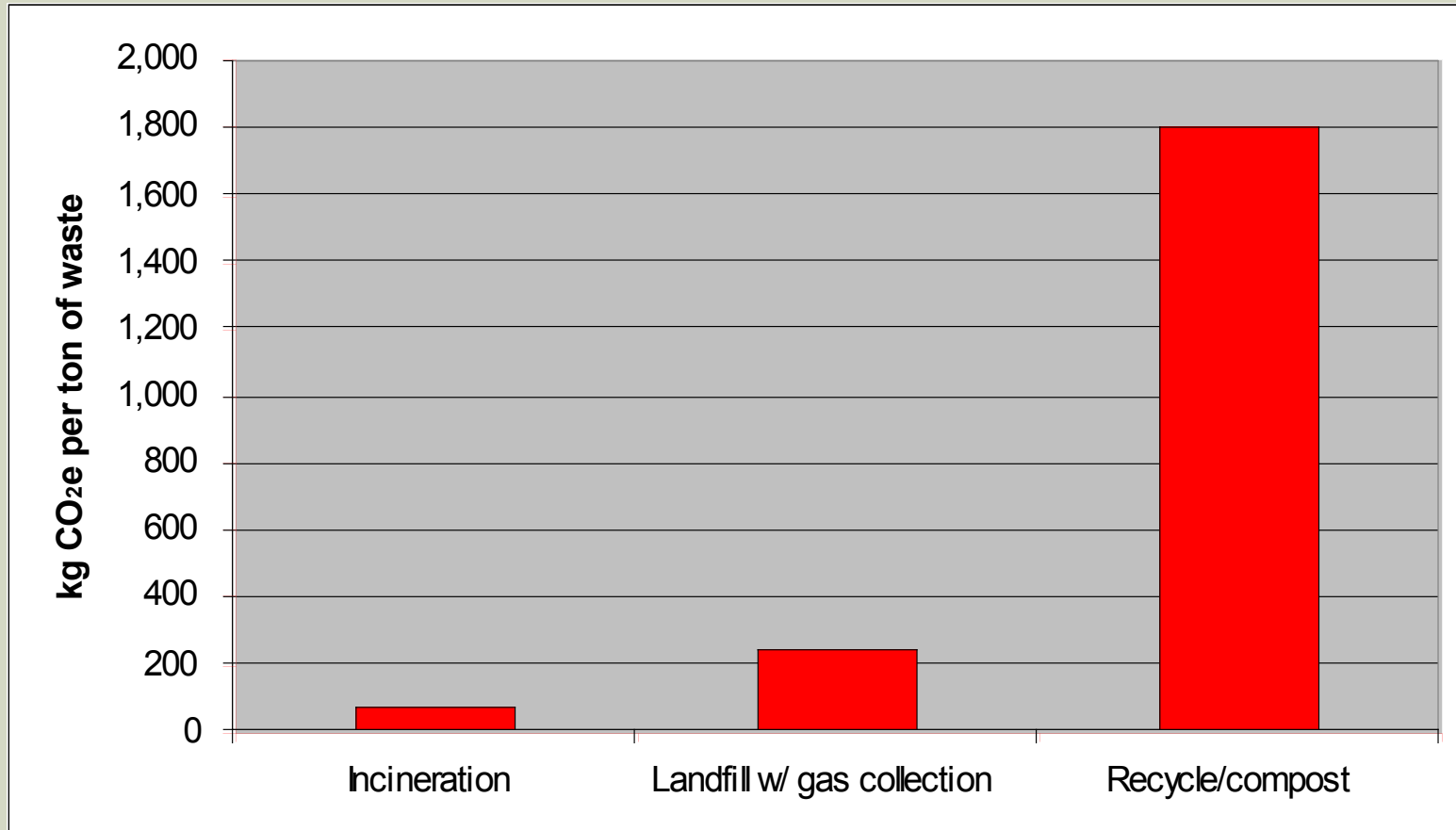
INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE WGIII – REPORT ON CLIMATE CHANGE MITIGATION

IPCC WORKING GROUP III
12TH SESSION
IPCC PLENARY
39TH SESSION
Berlin, 7–12 April 2014

are a key mitigation strategy in scenarios resulting in atmospheric CO₂ eq concentrations of about 450 or 500 ppm by 2100 (robust evidence, high agreement). Near-term reductions in energy demand are an important element in cost-effective mitigation strategies, provide more flexibility for decarbonizing the energy supply sector, hedge against related supply-side risks, avoid lock-in to carbon-intensive infrastructures, and are associated with important co-benefits. Integrated and sectoral studies provide similar estimates for energy demand reductions in the transport...

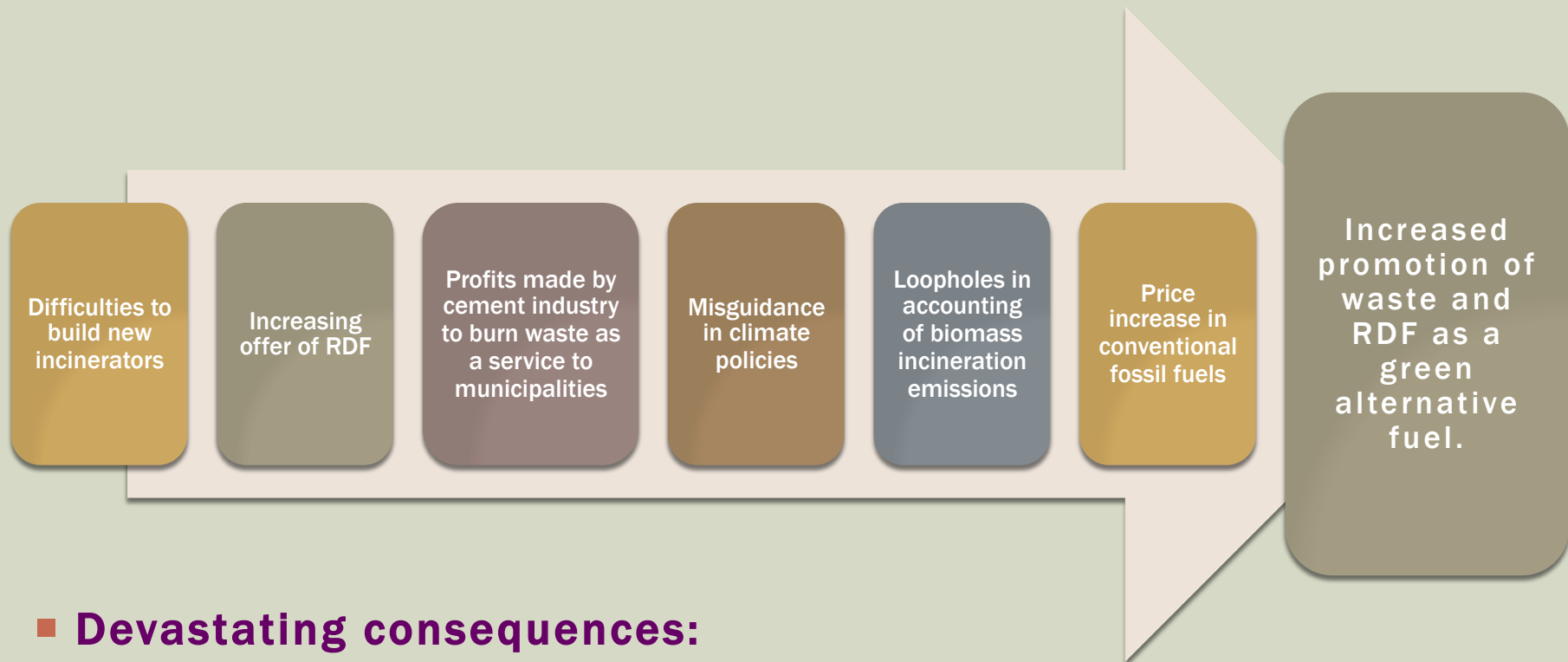


BIGGEST SAVINGS OF EMISSIONS COME FROM REUSING, RECYCLING AND COMPOSTING



FUENTE: Assessment of Materials Management Options for the Massachusetts Solid Waste Master Plan Review, Tellus Institute December 2008.

THE INCREASING USE OF WASTE AS AN ALTERNATIVE FUEL



■ Devastating consequences:

- Environment, health and economy of frontline impacted communities.
- Global implications: for example in food security.

WHAT ABOUT THE PRODUCT?

Casa costruita con cemento difettoso e sostanze tossiche: entrambe le cause penali finiscono in bolle di sapone. La prima perché la querela era stata presentata in ritardo, la seconda per la morte dell'impu-

tato. Alla farmacista di Musestre, nonché parte offesa Elisabetta Merloni non è rimasto che avviare una doppia causa civile da un milione di euro.

Ortolan a pagina XII



RONCADE Sarebbe stato utilizzato materiale scadente e nocivo per la costruzione della casa poi abbattuta

Cemento tossico: chiede un milione

La farmacista di Musestre Elisabetta Merloni ha avviato un'azione civile per ottenere il risarcimento

Roberto Ortolan

RONCADE

Non fermerà l'azione civile per il risarcimento del danno lo stop del procedimento penale nel quale un imprenditore, nel frattempo deceduto, era chiamato a rispondere dell'accusa di frode in commercio. Nella sostanza la Mac Beton spa - da quanto emerge dalla causa civile - avrebbe fornito il cemento (ma anche altri materiali) alla "Cfr sas di Rizzo & C." che stava costruendo l'abitazione della farmacista di Musestre Elisabetta Merloni. Da quanto emerso da 5 diverse perizie il

tutti i retroscena è l'avvocato Vincenzo Todaro, che assiste la committente dei lavori nonché parte offesa Elisabetta Merloni e che ha già chiesto un milione di euro di danni a "Cfr" (l'appuntamento con il giudice civile è imminente). «Ma analogo procedimento - puntualizza l'avvocato Todaro - lo avvieremo nei confronti di "Mac Beton". Fino a oggi non lo abbiamo fatto perché attendevamo gli sviluppi del procedimento penale che si è chiuso, senza però arrecare alcun pregiudizio all'azione civilistica».

La ricostruzione del legale della farmacista di Musestre dipinge un quadro a tinte fosche. «Ci troviamo

tra le quali molti bambini. A Musestre non ci è scappata la tragedia perché l'utilizzo del materiale scadente ha immediatamente pregiudicato la stabilità dell'edificio. Ma - precisa il legale - c'è di più. Cinque diverse perizie hanno messo in evidenza che in quel cemento - fatto pagare un terzo in meno del valore medio di mercato - erano presenti cenere, diossine e metalli pesanti. Sostanze tossiche nocive che avrebbero dovuto essere smaltite in discariche speciali e che invece erano finite in un'abitazione civile».

Infine l'avvocato Todaro chiarisce la quantificazione del risarcimento. «Il danno? L'esperto della Procura



A GLOBAL RESPONSE: MÉXICO, NOVEMBER – 2013: CREATION OF THE NETWORK OF COMMUNITIES IMPACTED BY THE CEMENT INDUSTRY



Ver su pronunciamiento en : <http://www.no-burn.org/pronunciamiento-del-frente-de-comunidades-en-contra-de-la-incineracion-en-mexico>

A GLOBAL RESPONSE: INDIA - POLLUTION MONITORING AND COURT CASE

CONCRETE TROUBLES

A report on the emissions from Cement Plants in India and a critique of the ongoing co-incineration of Hazardous Wastes in the Cement Industries



Global Anti Incineration Alliance (GAIA) – India
&
Community Environmental Monitoring, The Other Media

January 2014

- Lafarge, Holcim and Cemex in partnership with GIZ – Development Agency in Germany – promoting waste incineration in cement kilns in India.
- Evidence found about exceedingly high levels of heavy metals and carcinogenic emissions.
- Community environmental Monitoring bringing forward a petition to the Green National Court. Some of the demands are:
 - Cancel all permissions for co-incineration of wastes in cement plants across India, in violation of Indian regulations.
 - Transparent research and application of regulations.
 - Define strict guidelines for fuel that can be used in this process.
 - Direct industry to prescribe legal standards for heavy metal emissions in air from cement plants and see through its implementation.

QUESTIONS TO DEBATE

- How can we strengthen our local, national, regional and international common struggles?
- What would be our most effective strategies to stop this polluting practice?
- What would be our next steps?

GRAZIE!



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www.no-burn.org

www.zerowasteurope.eu