Αντώνης Μαυρόπουλος, CEO D-Waste, Πρόεδρος ISWA

4η ΒΕ, Κυκλική Οικονομία και ΔΣΑ

5th International Conference on Sustainable Solid Waste Management
Αθήνα, 21 Ιουνίου 2017

http://wastelessfuture.com
1. Ανθρωπόκαινο
Από την τάφρο της Μαριάννας στο Έβερεστ

Photo: Namgyal Sherpa/AFP/Getty
Tiny plankton at the bottom of the marine food chain are also consuming microfibres, with devastating impacts on the ecosystem of our seas. The microfibre is the long worm-shaped object at the centre of this image.

Read more: [http://www.dailymail.co.uk/sciencetech/article-4420992/Shocking-photos-reveal-plankton-consuming-microplastics.html#ixzz4fGm6L1gu](http://www.dailymail.co.uk/sciencetech/article-4420992/Shocking-photos-reveal-plankton-consuming-microplastics.html#ixzz4fGm6L1gu)

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Μικροπλαστικά σε εμπορικά αλάτια

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>Brand</th>
<th>Packaging material</th>
<th>Salt type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>A</td>
<td>PE + PET</td>
<td>Sea</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>PE</td>
<td>Sea</td>
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<td></td>
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<td>Glass</td>
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<tr>
<td></td>
<td>G</td>
<td>PE + PP</td>
<td>Sea</td>
</tr>
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<td></td>
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<td>PET</td>
<td>Sea</td>
</tr>
<tr>
<td>Iran</td>
<td>I</td>
<td>PP + Hostasol green</td>
<td>Lake</td>
</tr>
<tr>
<td>Japan</td>
<td>J</td>
<td>PE + PET</td>
<td>Sea</td>
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<tr>
<td>Malaysia</td>
<td>K</td>
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<td></td>
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<td>Lake</td>
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<td>N</td>
<td>PET</td>
<td>Sea</td>
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<tr>
<td></td>
<td>P</td>
<td>Glass</td>
<td>Sea</td>
</tr>
<tr>
<td>South Africa</td>
<td>Q</td>
<td>PET</td>
<td>Sea</td>
</tr>
</tbody>
</table>

Table 1. Detailed information on the salt samples analyzed in this study. ¹Polyethylene. ²Polyethylene terephthalate. ³Polypropylene.

Source: The presence of microplastics in commercial salts from different countries. Ali Karami, Abolfazl Golieskardi1, Cheng Keong Choo, Vincent Larat, Tamara S. Galloway & Babak Salamatinia www.nature.com/scientificreports
143 νεκροί σε 45 ημέρες!

City of burning lakes: experts fear Bangalore will be uninhabitable by 2025

The illegal dumping of waste mixed with mass untreated sewage in India’s Silicon Valley is creating a water crisis which threatens residents’ health - and is causing the city’s famous lakes to catch fire.
❖ Ανάγκη για δραστική καινοτομία σε δύο επίπεδα
❖ Σε επίπεδο εταιρικής διαχείρισης και supply chains
❖ Σε επίπεδο περιφερειακό, εθνικό, τελικά και παγκόσμιο
ΠΡΟΒΛΗΜΑ 1894: The Great Horse Manure Crisis

Λονδίνο

50,000 άλογα

Νέα Υόρκη

100,000 άλογα

Κοπριά: 11,3 kg/άλογο/ημέρα

Λονδίνο

567 τόνοι/ημέρα

18,250 τόνοι/έτος

New York

1.134 τόνοι/ημέρα

36.500 τόνοι/έτος

“In 50 years, every street in London will be buried under nine feet of manure”

Times Newspaper
2. Σε επίπεδο εταιρειών…

Apple announces goal to eventually create a closed-loop supply chain
Τα οικονομικά μεγέθη

700,000,000 iPhones πουλήθηκαν από το 2007
235,000,000 iPhones πουλήθηκαν το 2015
40,000,000 $ η αξία του χρυσού που ανακτήθηκε το 2015
3. Σε επίπεδο πολιτικής και υποδομών

Recycled-material prices drop
Prices fluctuate for recycled materials, and some are hitting severe lows compared to four or five years ago.

PRICES FOR FOUR DIFFERENT RECYCLED MATERIALS
Indexed to March 2005 prices

Source: Institute of Scrap Recycling Industries
MARK NOWLIN / THE SEATTLE TIMES
Τα νέα απόβλητα

Wearables 1.0 → Wearables 2.0

IRONMAN → INVISIBLE MAN
The Internet of Packaging
HYBRID MODELS

Smart Collection: eWAS project, Seville

Sensors, mobile apps and optimisation of logistics in a single package
Big data sets

Source: http://wastelessfuture.com
We have just started to discuss and try to understand what will be the potential impacts of the rise of robots in our lives and societies. But, the pace of change is too fast and very soon we will have to deal with the real consequences rather than the potential ones. As I use to say in my lectures “Fasten your seatbelts, the fourth industrial revolution is already here and disruption is the rule, not the exception”.
The Future of the Waste Industry & the 4th Industrial Revolution - Take part in ISWA’s Global Survey now!

ISWA is reaching out to the waste management industry with a first of its kind survey on the fourth industrial revolution.

14 Nov 2016 - As announced in the latest blog of Antonis Mavropoulos, ISWA would like your input and opinions on the role of new and emerging technologies in the waste management industry.

We have designed a short survey which should not require any more than ten minutes of your time. The answers you provide us with will be the basis for evaluating and identifying the most important challenges the waste management sector is going to face in the future.

The aim of the survey is to establish opinions and views to understand the impact of the fourth Industrial Revolution on the waste management sector and we will present an analysis of the results to you afterwards, identifying the challenges of our industry in the future.

Once again, you can find the survey here: https://www.surveymonkey.com/r/4thindustrial
Πως να σκεφτούμε;
Ευχαριστώ

www.atlas.d-waste.com
www.d-waste.com

http://wastelessfuture.com