

IS THIS THE TIME FOR THE U.S. TO BE WASTING ENERGY?

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I. Is this a time for the U.S. to be wasting energy? We are living in a time when people are making tough choices between heat or meat? Between medications or transportation? When our nation is being held hostage to foreign oil and our reliance on high carbon solutions is clearly a problem? If it is not, why aren't we talking – no – shouting about it?

Amory Lovins, Co-Founder and Chairman of the of Rocky Mountain Institute was recently quoted as saying that, “when it comes to energy efficiency and conservation, we are looking beyond low hanging fruit, to fruit that is laying on the ground.” As everyone in this room knows, much of that “fruit” is fuel sent to landfills. According to BioCycle and the Columbia Earth Engineering Center (2006), 248.6 million tons or more, of post recycling waste – fuel will be disposed of in U.S. landfills this year. This fuel degrades and produces methane and only a portion of that methane will be captured and converted to energy (roughly 70 percent over the first 30 years in the landfill).

This “fruit” will consume precious residuals disposal capacity and will present challenges to communities including management responsibilities and costs far beyond the active and post closure monitoring period at the Landfill.

With 50 to 60% of the roughly 250 million tons disposed of being biogenic that's about 139 million tons of renewable fuel "fruit on the ground" each year, a fuel that holds the potential for at least 500 kWh per ton or 8.720 million megawatts hours of renewable energy, enough to avoid burning 35 million tons of coal, we are talking about wasting the equivalent of \$11.1 billion worth of imported oil (at \$80 a barrel) from the Middle East, or enough renewable energy to power 5.8 million U.S. households, from fuel that would otherwise be wasted in a landfill.

By treating this "fruit" as fuel we avoid the introduction of methane emissions from landfills, CO₂ emissions from fossil fuel combustion, and CO₂ emissions from virgin metals production. For every megawatt hour of electricity produced by waste-to-energy instead of coal 0.47 tonnes of carbon dioxide equivalents are avoided. That means that for the biogenic portion of waste that would have otherwise been landfilled, roughly 33 million tonnes of carbon dioxide equivalents emissions could be avoided each year.

Statistics in the US and abroad confirm that we can have all of these benefits while achieving higher recovery rates for recyclable materials where there are energy from waste programs as compared to less integrated systems.

All good news, right? So what do we do with it? Nothing I have said so far is new to the members of this audience but, there is a much larger audience that we are not reaching.

There is an audience – a NEW generation - that really matters, that influences public policy decisions, that decides to purchase renewable energy that cares about the environment, sustainability, and the need for energy independence. The soldiers serving in the Middle East are part of that generation.

This is the audience and generation that has been left holding a bag full of unwise decisions that were made on their behalf.

Our industry needs to tune into this new audience that is so much a part of the new world and global marketplace. The last time our nation looked carefully at energy from waste – there was lots of excitement followed by waves of concern. Arguments were developed and opposition grew, successfully halting growth in our industry. Fast forward to today – we are all excited about new opportunities but, the ghosts from our past continue to haunt us: Old voices, outdated information, and unsubstantiated fears that there would be cancer, birth defects, destroyed property values, less recycling, more odors, noise. Yet, twenty years later we know the truth, it is a matter of record. And we know a lot more about our technologies – none of those risks were real and that WTE plants make good neighbors.

These facilities are among the most highly regulated, closely monitored and precisely controlled of all the options in the power generation industry. Beyond the environmental facts, WTE plants stabilize landfilled waste and WTE gives communities control over disposal destiny and long term pricing.

The facts speak for themselves – and we repeat them often to each other. We assume people are listening – but, we are wrong.

The bottom line is that we have a Great Product and a Lousy Marketing Plan. Let's think about a new marketing plan that recognizes that we have been making the same old case to the same old opposition audience. Things are different now; a new generation has emerged with fresh minds and global perspective. We are overlooking smart young people that want to do the right thing. These are people who are plugged into the new media. Men and women who have travelled the world and seen progress in other countries. These are people that have only known a time where modern, safe, reliable technology is used to recover energy from waste. They view recycling as part of the routine waste management process. They are clearly concerned about climate change and the need for low carbon, renewable energy. They need to know that energy from waste is a means to achieving a zero waste society where zero is possible when recycling leftovers are converted to energy or safe and useful compost. They understand that **Sustainability is about Not Wasting Resources**. We have failed to engage this new audience - THE generation that will inherit good and bad decisions. So, now that we have identified our audience, how do we reach them?

Carl Pope, the Executive Director of the Sierra Club summed it up at the recent Clinton Global Initiative Annual meeting when he mentioned that the key to accomplishing big things is to, “form coalitions.” Where is our coalition? Is it

IWSA, ISWA, SWANA, MWRA, WTERT? Not to belittle their contribution (I am a member of all of them) but keep in mind that the value and intent of a coalition is to gather a diverse collection of partners that have a common interest and significant cumulative power. Garbage folks talking (and agreeing) with other garbage folks is just not going to cut it. Our plan should think BIG. We should learn from the Nuclear and “Clean Coal” industries. Our plan should use TV, Print Media, and the new media including blogs, You Tube, and other internet tools. Our message should precede the presidential debates, and be flashed across screens at sporting events. Our industry should sponsor Washington Week on PBS, The Office on TBS, and the Dailey Show on Comedy Central. Our message should be crafted by a coalition of partners willing to collaborate to accomplish BIG things, organizations that care about global environmental, health, education, poverty, climate, and energy issues organizations that know that wasted fuel is a wasted opportunity to save or improve lives.

To be specific: Groups like the Clinton Global Initiative (VonRoll is a member), GROCC at the Earth Institute here at Columbia (Jeff Sachs), one of the first world organizations to recognize WTE as part of the solution to climate change (as GROCC members, Covanta and HDR helped make this happen).

The Climate Group (Steven Howard) which focuses on encouraging business and communities to collaborate to reduce GHG emissions, and the US Conference of

Mayors Climate Action Council (Kevin McCarty), the force behind 850+ mayoral signatures on The Mayor's Climate Action Plan, Our plan should also include partnerships with specific not-for-profits that see the role energy from waste plays in fulfilling the most basic needs groups like the Earth Policy Institute (Lester Brown), Anti-Poverty Campaign, ONE (Bono), The National Association of Evangelicals (Richard Cizik), part of the GROCC Position Papers, Harvard's Kennedy School (David Gergen) -Practical and pragmatic, Good Energies (Richard Kauffman), and Ceres (Mindy Lubber), the Clinton Climate Initiative (Ira Magaziner) - HDR is working on solid waste issues with them now in Mexico City- the Center for American Progress (John Podesta), and the Energy Action Coalition (Billy Parish) – a very aggressive campus-based movement. Our plan should align with and embrace the Biomass industry, where the action is (at least 14 new plants announced this year) and companies like Duke Energy (Jim Roberts), FP&L (Lewis Hay) and AREVA (Jean-Paul Crouzilon).

I love our industry publications but our plan needs to hit media beyond WasteAge and MSW Management – we need to communicate with TIME (Mark Halperin), NEWSWEEK (Lally Weymouth), NYT (Nicholas Kristoff and Tom Freidman) and the Economist (Vijay Vaitheeswarn), our plan should include the new media – MTV (Stephen Friedman).

Why would the media be interested? Don't you think that fruit lying on the ground – the equivalent of 248 million barrels of imported oil committed to landfills each year is NEWS? It is scandal and controversy; it is a story with the makings of a BIG discovery --- When we are choosing between heat and meat, how could we waste all that energy? Our plan should be framed around local and global needs and the need to transition to Renewable Energy and ultimately a wind and solar powered world; it could take 30 years to make this transition and energy from waste is a perfect and practical bridge. It is a bridge that can help reduce GHG emissions and consumption of raw materials/natural resources. It is a bridge to the creation of good paying, skilled green collar jobs. Energy from waste is a bridge to living sustainably. Our plan should emphasize the benefits associated with our products and stress the fact that energy from waste is like harvesting fruit from the ground.

WTE is a key component in a massively integrated/sustainable world: Let me give you an example of where these words have moved to action – you heard about it yesterday, the Paris Isseanne WTE facility – a green building, in the center of major city, MRF-Energy-Metals-Ash recovery, and a short stack. Next to housing, only a few hundred feet from TF1 TV headquarters, in sight of one of the wonders of the world, the Eiffel Tower – fantastic! In the U.S. we have dozens of other great examples – stories that many of you are responsible for. We are producing homegrown energy and displacing imported oil and coal with carbon negative

systems. Our technologies are waste stabilizers, landfill space savers, and essential tools that enable maximum recycling. Our plan should be about NOT WASTING RESOURCES.

As we assemble our new marketing plan, I suggest that we follow a Leader such as Jim Werner of Lancaster County SW Management Authority. The Authority has developed a Massively Integrated Solid Waste System that squeezes value out of every element of the waste stream. It has demonstrated how to get to zero in ZERO waste management. It is publicizing the success of the system by pointing out to its customers that much of their energy comes from what would otherwise have been wasted fuel.

In Summary – We have a Great Product and a Lousy Marketing Plan. There is a \$100 billion opportunity before us in the U.S. alone. It is time for our industry to roll up its sleeves, get out the check book and commit just 1/10,000th of a percent of the value of the opportunity to deliver our message, it is time to take action and resolve to craft a new plan to form a coalition – with new partners. Our plan should be framed around local and global issues, target Congress, state regulators and local leaders and use the media to help in articulating the benefits that align with local and global needs, can we do it? YES WE CAN!

Think about what Waste Management has accomplished. Now, when you tune into CNN Anderson 360 as I did this morning, you see a bunch of green trucks, happy customers, the WM logo and the message: Think Green, Think Waste Management! We should enlist the “Jim Warners” of our Industry to lead the local charge, challenge the major industry players/vendors/associations (including IWSA, ISWA, WTER, and SWANA) to pull an expanded coalition together. The question at hand is: When people are choosing between heat and meat, when our nation is hostage to imported oil, when carbon emissions are rising to what could be a point of not return; is this the time for the U.S. to be wasting energy?

We can take the moral high ground to counter the old arguments with modern facts, engage the new generations to support a truly sustainable solution.

It is our opportunity to pose a new question: Why Waste Energy – when you can make Energy from Waste!

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