

**Clean Tax Cuts at the UN Ocean Conference:
Plastics in the Ocean
The Sabin Center for Climate Change Law, Columbia University
Room 304, Jerome Green Hall
June 6, 2017**

EXECUTIVE SUMMARY

Approximately 20 professionals in the fields of public policy, academia, industry and science convened at Columbia University on June 6, 2017 to focus on the crisis of plastic waste, especially in the ocean, and the potential to mitigate the problem of plastic pollution by applying a Clean Tax Cut to those firms that are able to reduce waste and inefficiency, and reduce negative externalities. The meeting was co-hosted by Ocean Recovery Alliance, Doug Woodring; Mission Blue, Charlotte Vick; IUCN, Joao Matos de Sousa; Grace Richardson Fund (GRF), Rod Richardson.

Doug Woodring opened the meeting with an overview of the plastics crisis, and showed both the problems and the improvements in handling plastic. In a video presentation he also outlined the promising work that many organizations have begun, and showed tools available to work on this issue. See website for more info: <http://www.oceanrecov.org>.

Rod Richardson presented the [Clean Tax Cuts \(CTC\)](#) concept, a new policy paradigm designed to accelerate capital to and speed deployment of business solutions to these and other serious environmental problems. A new GRF white paper ("[Clean Tax Cuts: A Year of Policy Design](#)") describes the basic CTC concept, promising new CTC mechanisms for seven sectors and markets that have been designed over the last year, and next steps in CTC policy design. A brief excerpt from that paper defines CTC as follows:

Clean Tax Cuts aim to accelerate profitable solutions to any kind of waste or pollution, by applying the supply side principle "if you want more of something, tax it less." In particular, CTCs cut tax rates investors pay on debt and equity in clean investments – these include simple rate cuts to income, dividend, interest, capital gains and other capital taxes, specifically for investments that reduce the most costly waste and inefficiency – the root cause of all major pollution and negative externalities.

By simply reducing investment tax rates, CTCs remove barriers to capital, which simultaneously increases supply and demand for clean solutions: this one policy both increases ROI and capital investment flows, and reduces cost of capital and cost of outputs. The result? More good stuff, like cheaper clean energy or other waste reducing solutions.

[The Columbia University proposal for tax-exempt clean-asset-based green bonds](#), for example, offers a possible multi-trillion dollar solution, a simple, uniform, technologically neutral means of accelerating a wide variety of clean infrastructure deployment, globally. Jigar Shah (SunEdison founder and co-founder of Carbon War Room and Generate Capital) recently [wrote that "CTCs could quickly expand to double or triple \[the\] pace" of clean infrastructure deployment.](#)

Rod suggested the new CTC mechanisms could be adapted to the problem of curbing plastic waste. For example, tax exempt loans and bonds could lower the cost of financing recycling and waste-to-fuel plants, so reducing the cost and increasing the profitability of these operations and their products. Income from recycled plastic products, and products sold with sustainable packaging and non-plastic alternatives could be taxed at a lower rate, making waste plastic a more valuable commodity, while also encouraging source reduction.

SESSION DISCUSSION: OPPORTUNITIES

- Progress made on plastics sorting and recycling same-type plastic.
- Support should be given to those concerns who have high maintenance costs, including recycling facilities, where equipment includes carriers, sorters, washers, compressors, and other heavy equipment. Also include manufacturers of scrubbers, and operators of waste-to-fuel concerns, and Material Recovery Facilities (MRFs).
- Allow a tax cut to companies that use recycled material, like Dell, in their packaging.
- Any of these concerns could be a candidate for a CTC, and more focus needs to be put on the varied industries, solutions and processes which could qualify for CTCs in this sector.
- Other ocean-related CTCs can be discussed, but this should likely be in a different section/workshop than that of plastic sustainability and waste reduction.

OBSTACLES AND THAT COULD BE ADDRESSED VIA CTCs

- Single use plastic packaging is one of the biggest waste problems, so this is one area that should be focused on within the CTC program.
- Local, Industrial, Urban - Different regulators pose barriers to collection and recycling.
- Construction, Operation, Repair and Maintenance for Plastics Sorting and Recycling equipment is very capital intensive. Repairs are often not undertaken. Contracts for this type of equipment is 20-30 year term, so there is little incentive to upgrade equipment.
- A main challenge for efficient recycling is recovering the used plastic from the users in “pure” or uncontaminated form.
- Waste pickers/handlers often do not have equipment to prep plastic waste for its next use.
- Contaminants on unwashed returned plastic often make the cleanup more difficult and costly, and render much material unsuitable for reuse.
- The market for recycled plastic material is not great, and repurposed material tends to be more expensive than virgin material (due to a lack of economies of scale).
- Today’s Material Recovery Facilities (MRFs) are often not well-equipped to handle the types of plastic that are co-mingled within today’s waste streams.
- The co-mingling of colors and materials requires more sorting, and thus makes it harder to re-purpose plastic. Significant technical challenges remain on plastics reverse engineering.
- Energy-from-Waste has many new options via technology and scrubbing (anti-pollution) equipment, and needs to be part of the macro waste solution. It is often the lowest value-creating option for the reuse of plastic, however, so if recycling can be done, there are likely better value-generating options than creating energy.
- Plastic to Fuel technology (liquefaction via pyrolysis) has more value creation than waste- to-energy, so it should be considered a new and interesting sector to support for the plastic that does not normally make its way to recycling (roughly 90% of the world’s plastic today).
- The ocean is often considered “no man’s land” in terms of international capacity for enforcement on illegal

dumping. In the policy space, some environmental discussions which impact the ocean (like plastic pollution, with 80% coming from land), may proceed more constructively when the ocean is not the main catalyst for change, as many companies do not feel they are “ocean related” companies, or because government agencies do not have the resources or knowledge to address problems of transboundary pollutants, like plastic.

- Partners to fund research, either policy or technology, are not easy to come by.
- People may not trust Green Bonds 100%. Many worry that issuers are ‘Green Washing’ via bond use (not using them for green end uses).

NEXT STEPS

Many members of the group expressed interest in continuing this research. Tasks include finding funding partners for additional research, financial analysis and hosting the next charrette on plastic sustainability and recycling. This can include international applicability and political feasibility.

We welcome suggestions and continued participation and support. The goal and objective is to have a full charrette within the year, to design specific CTC mechanisms that can reduce plastic waste. The Columbia Earth Engineering Center and the Earth and Environmental Engineering Department have kindly offered to help with the creation of a pre-charrette white paper, and post-charrette report which can then be used for relevant stakeholders.

A meeting of the various institutes, experts and scholars working on CTC policy development is scheduled for Tuesday, September 19, 11am - 3pm at the Jerome Greene Annex, hosted by GRF and the Sabin Center at Columbia University.

The purpose of the meeting will be to strategize next-level CTC development, and collaboratively work out a set of CTC project proposals, across multiple sectors, that can be easily unified into coherent economy-wide CTC legislation, suitable either for US tax reform, an infrastructure bill, or an international or global agreement. Proposals vetted on Tuesday will be presented on Thursday afternoon, by invitation, to a new council of donors interested in CTC policy innovation. To register for the Tuesday meeting, please email info@cleantaxcuts.org, with some information about yourself, and your proposal for CTC development.

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