

Solid Waste & Circular Economy

“The Economics of the Coming Spaceship Earth”

Presented by Kenneth Boulding, Washington, D.C. on March 8, 1966

Sixth Resources for the Future Forum on Environmental Quality in a Growing Economy

Cited as the first expression of “circular economy”

Nanaimo Task Force on Economic Recovery, July 31, 2020

Larry Gardner, Manager of Solid Waste Services

Dynamic Opener



Economics of Waste

“Is there a business case for a zero waste strategy in British Columbia?”

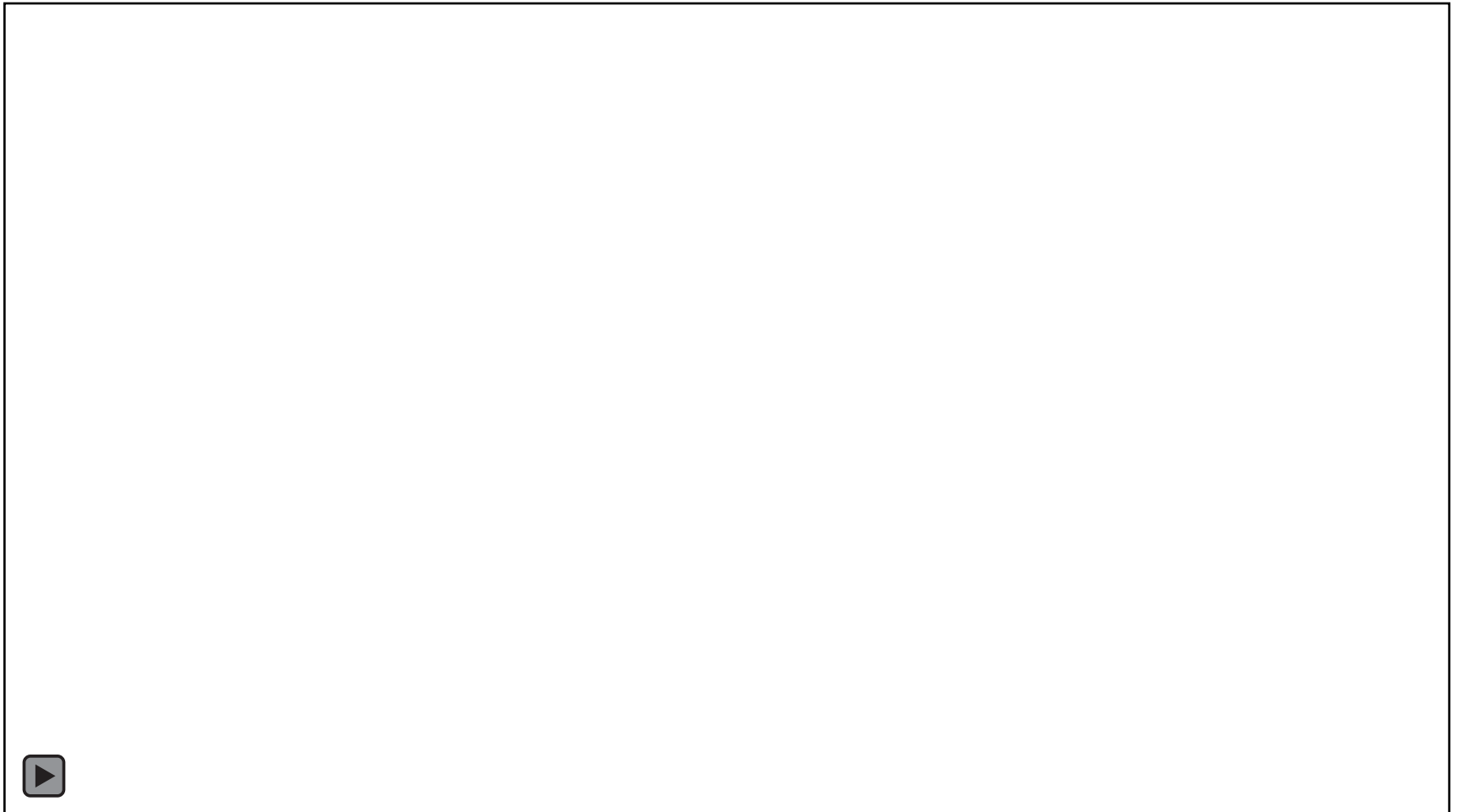
(MOE, Zero Waste Business Case, Draft, May 2013)

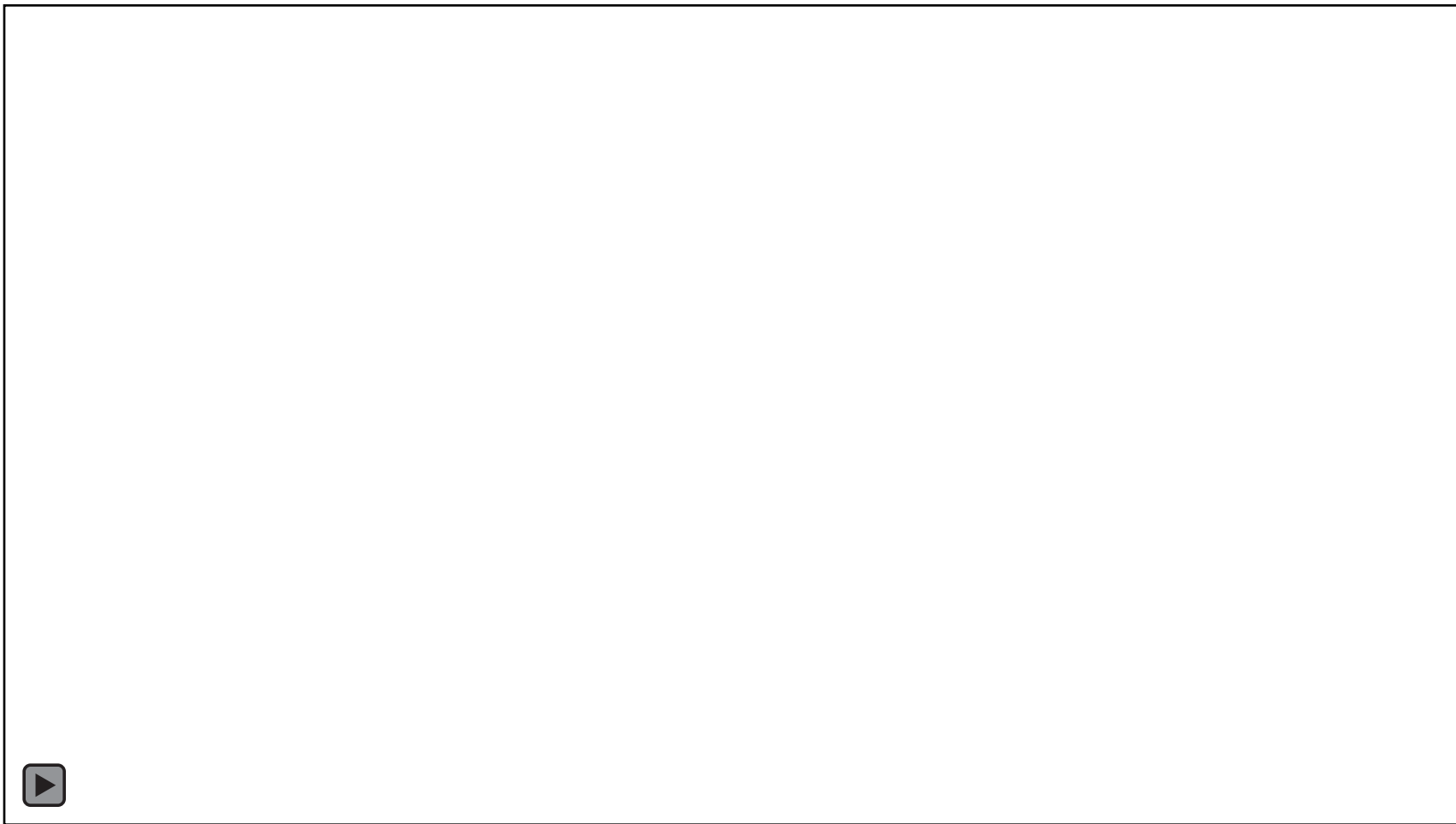
Findings:

- Depending on implementation (i.e., 62% vs 81% diversion):
 - \$56 million and \$126 million of annual net economic benefit;
 - create between \$27 million and \$89 million in new annual GDP;
 - generate between \$755,000 and \$2.5 million in new annual income tax revenue for BC.

So how does recycling increase GDP?

(picture worth a thousand words)





Solid Waste Management Plan: *Looking to the Future*

- Grow the waste industry around diversion
- More and better services to residents

How?

- Mandatory Source Separation
- Waste Hauler Licensing

Mandatory Source Separation

From this:



To this:



Bylaw:

- Requiring 3 stream collection, or,
- Post collection sorting

Waste Hauler Licensing

Economic Model:

- Reduced tipping fee for Licensed Haulers
 - *Waste flows to industry*
- Disposal Levy for waste shipped to any landfill or incinerator
 - *Economic disincentive to dispose*

Challenges to Industry Growth



Mark Sakamoto and Demxx's David Behan

CBC: Do you think we'll see a renewal in business like yours as we start to think more about how much garbage we create?

DB: I think it's a dying breed, and the reason for that is land values and local governments. They don't zone enough industrial land for outdoor sales. And because there's not enough industrial zoned land, the value of it increases exponentially. It just basically pushes it out. There was a few of them in Vancouver. One of them just sold last year to a lumber yard, and they got a good dollar for that. And they retired and got out of the business.

How will we manage end of life materials in the future?



Parting thought...

*...what can we do to remove barriers
to industry growth?*

Thank you!