

Move over Waste Management Hierarchy... there is a new kid in town





Jennifer Koole Executive Director, Recycling Council of Alberta

RECYCLING

. Page 2

CIRCULAR ECONOMY

RCA

Our Future is Circular.

w - remuser and Joint Bookrum

DO YOU REMEMBER WHERE YOU WERE WHEN...

The Blue Jays won the World Series? The Raptors won the NBA Championship? Wayne Gretzky got traded to L.A.? Sidney Crosby scored the Golden Goal?



YOU'LL REMEMBER TODAY AS THE FIRST TIME YOU LEARNED ABOUT THE R-LADDER!

Waste Management Hierarchy



Recycling Council of Alberta R-Ladder

CIRCULAR ECONOMY	SHO	Smarter manufacturing and use of products	R0 – Refuse	Prevent the use of products and raw materials in the creation of goods, and services
	ORT LO		R1 – Rethink	Reconsider ownership, use, and maintenance of products
	OPS		R2 – Reduce	Decrease the use of raw material in products and services
	MEDIUM LOOPS	Extending the life of a product	R3 – Reuse	Secondary use of products by another owner for the same intended purpose
			R4 – Repair	Maintain and repair existing products for extended use
			R5 – Refurbish	Restore and improve products to a satisfactory condition for extended use
			R6 – Remanufacture	Make more products with the same purpose with discarded products or parts
			R7 – Repurpose	Make new products with a different purpose with discarded products or parts
	LONG LOOPS	Material processing and/or conversion	R8 – Recycling	Process waste into new products or materials that can be used for new products
			R9 – Recovery	Process waste to recover energy (e.g., anaerobic digestion, waste-to-fuel processes, bioreactors, landfill gas capture to electricity, incineration with electricity or heat generation capture/use)
LINEAR			Landfill & Incineration Incineration: burning waste without energy recovery	

Adapted from: Circularise (https://www.circularise.com/blogs/r-strategies-for-a-circular-economy) and PBL (2017), Circular Economy: Measuring Innovation in the Product Chain, J. Potting, M. Hekkert, E. Worrell et al.

The Sustainabile Way: Circular Economy







PLAYBOOK



HOW TO USE THE PLAYBOOK TO WIN:

R-Ladder is the game, Circular Economy is the prize, and the previous slides on the sustainable way are the playbook Higher score for shorter loops (green) 0 Low to no score for recycling and recovery Negative scores for landfilling or burning Highest scores for regenerating nature Higher scores for staying in a loop forever!

Let's try out some plays







- The R-Ladder ranks actions for a circular economy top = best
- Think of loops, not lines. Keep materials in play.
- Use the playbook to make smarter, higher-value decisions
- Circular economy isn't just about managing waste it's about designing out waste and regenerating value

As the RCA is transitioning, we invite you to join our game!

The more players, the more winners!

RECYCLING COUNCIL OF ALBERTA RCA

Our Future is Circular.



RECYCLING COUNCIL **OF ALBERTA**

RC

THANK YOU!

info@recycle.ab.ca

recyclingcouncilab



Recycling Council of Alberta

Recycling Council of Alberta



R-Strategies for a Circular Economy

Recycling Council of Alberta Adapted R-Ladder



Adapted from: Circularise (https://www.circularise.com/blogs/r-strategies-for-a-circulareconomy) and PBL (2017), *Circular Economy: Measuring Innovation in the Product Chain*, J. Potting, M. Hekkert, E. Worrell et al.



R-Strategies for a Circular Economy

Recycling Council of Alberta Adapted R-Ladder



Circular Economy Play Book

Wooden Table	Plastic Water Bottle	Your Own Product/Service					
 A table gets made (MAKE) A table gets used as a kitchen table (USE) A table gets used as an office table (R3) A table gets used as a kids craft table (R3) A leg on the table gets broken, but then it gets repaired. (R4) The table then gets used as a garden shed table (R3) Someone comes along and loves the table and refinishes it and adds new feet/castors. (R5) The table then gets used an office table again (R3) The table is then cut into smaller pieces and used back in the garden to mark the rows of the plants. (R7) Eventually the table breaks down and gets composted (R9) and helps the soil grow another tree to make another table (MAKE) 	 Choose to drink water from the tap (R0) Need to buy bottle of water at airport (USE) Refill bottle at airport (R3) Refill bottle at hotel (R3) Put bottle in recycling bin (R8) New bottle is made from plastic (MAKE) 						