

# Waste not, want not: the benefits of a circular economy in N.B.



## A circular economy makes better use of resources so we create less waste, less pollution, and more sustainable products

The way we make stuff just has to change. We built an economy with a single focus—make profit—and it's contributed to a real mess: pollution causing climate change and extreme weather, rampant clearcutting of forests causing species loss and extinctions, and a seemingly endless, overwhelming barrage of garbage filling up landfills, littering our communities, leaching into our parks, forests, rivers, and oceans.

### What can we do?

Experts say one solution is to change the way we make stuff: switching from a linear economy to a circular economy.

## What is a circular economy?

In a nutshell, a circular economy aims to create the least possible amount of waste for everything we produce—from food to socks to fridges and homes and even electricity.

In our current linear economy, we don't think about reusing or recycling a product until the end of its 'product life'—until it's no longer useful to us in its current state. A circular economy, on the other hand, right from the outset is built on the principle of reusing,

repurposing and recycling products and raw materials so we reduce pollution and lessen the use of virgin resources, decreasing the pressure on biodiversity loss and helping to fight climate change.

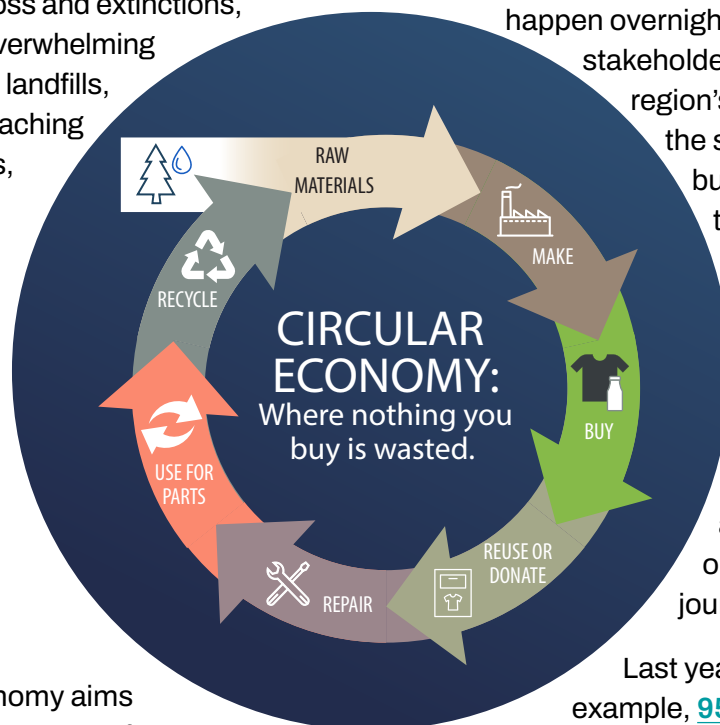
## Building a circular economy in N.B.

Changing from a linear to circular economy won't happen overnight. It requires leaders and stakeholders from every sector of a region's economy and every part of the supply chain to participate in building closed loop systems that make sense and are efficient. There is no one-size-fits-all approach.

While it's a relatively new concept in North America, countries like Japan, the Netherlands, Germany and South Korea have been on this community overhaul journey for years.

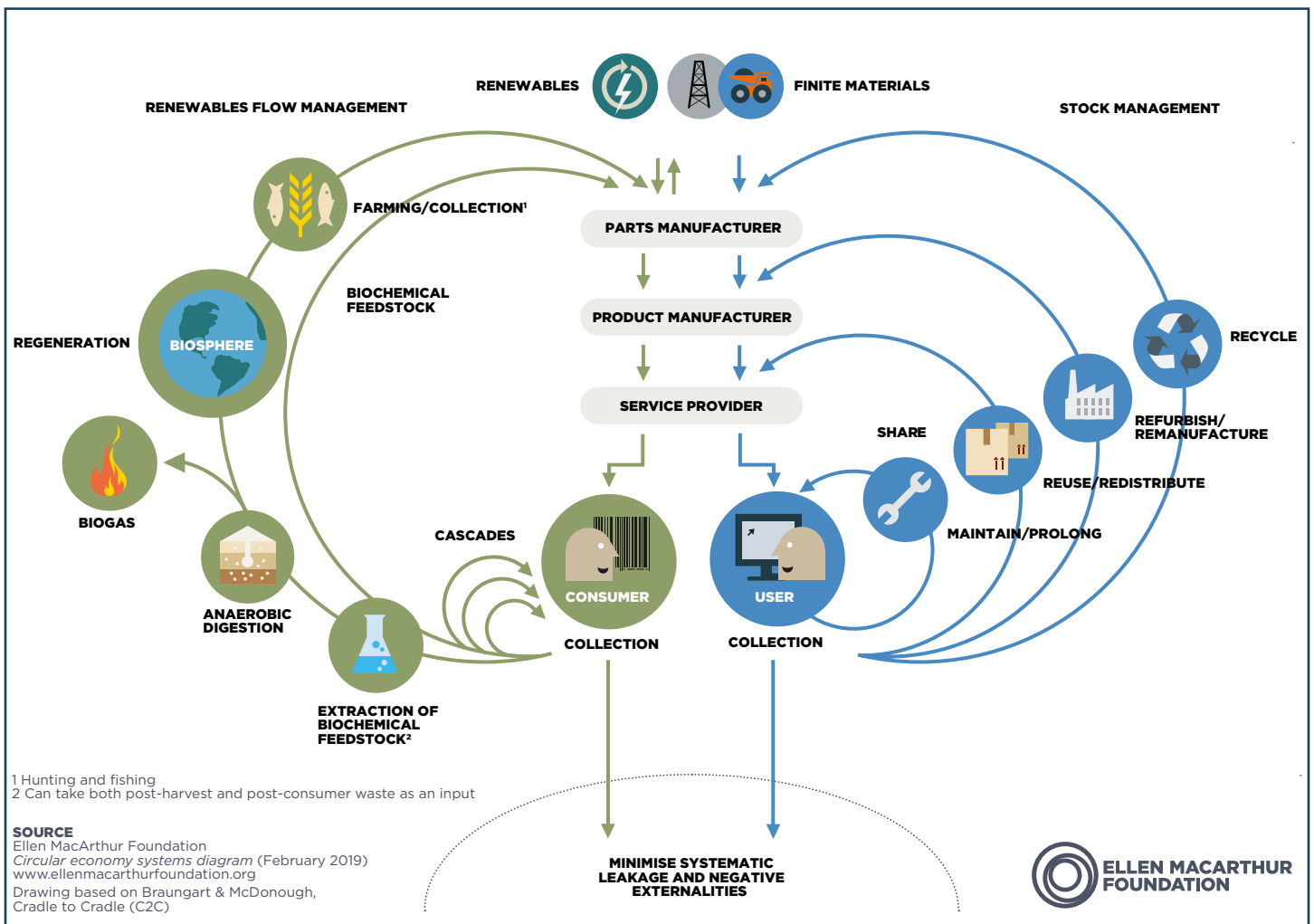
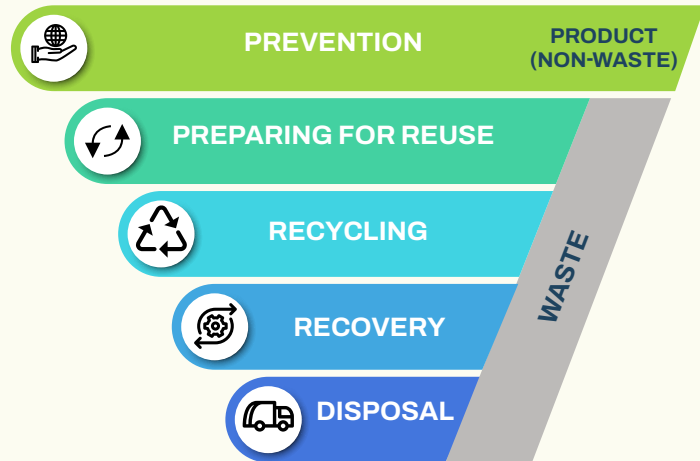
Last year in South Korea, for example, **95 per cent** of all the country's food waste was diverted away from the landfill and given a new use. Liquid waste was turned into biogas fuel to generate power, while solid food scraps were turned into feed for livestock.

North America's car-centric and rural design makes it difficult to copy and paste exactly what others have done, so communities need to collaborate amongst themselves as much as look to others.



## Waste hierarchy principle

One framework we can use to help design a circular economy for North America is the ‘**waste hierarchy principle**,’ as shown in [Figure 3](#). Each level is a goal. Once the infrastructure within a community has established a reliable “disposal” system, community members can start thinking of ways to ‘recover’ as much of the disposed material as possible.



A circular economy is much more interconnected than our linear model. It encourages planning from a whole economy scale and looking for opportunities to create ‘closed loop’ production cycles within and across all sectors of the economy. See this butterfly diagram from the Ellen MacArthur Foundation, a leading circular economy advocacy group in Europe. And, check out the foundation’s [fantastic and short video](#) explaining what a circular economy is all about.

## What might it look like in N.B.? Some people have already started the circular economy journey.

Take the Montagne de la Croix sanitary landfill in northern N.B. The landfill receives more discarded construction material from the industrial sector than from all 47,000 residential landfill users' total trash combined. Richard Lebel, director of ecological management at the Northwest Regional Service Commission, says he wants to introduce that waste back into his local economy as a new product.

*"I have a longer vision of a project... to build a shredder that is run by biogas," Lebel tells us. "I would shred those materials (the construction waste) and try to send it back to the hospital or universities where they have big boilers so they use that for biomass to feed their infrastructure."*

Ideally, less energy would be used if this CDR material were reused at an earlier stage rather than being burned. However, if the material is at least being recovered for energy rather than just disposal, the waste hierarchy tells us this is one step closer to a circular economy.

The [Kent Regional Service Commission 6](#), in the southeast part of New Brunswick, is practicing an even higher level of circular economy. As you go up the levels of waste hierarchy, the amount of waste you divert from the landfill grows. This region has the highest level of diversion compared to any other in New Brunswick. As a benchmark, the average Regional Service Commission region has a total diversion rate of around seven to 12 per cent.

Their neighbors in the Southeast Regional Service Commission 7 have also started a new program which allows residents to work on the "preparing for reuse" level of waste hierarchy. Starting in 2021, this region began hosting a bi-annual event at the Moncton Coliseum where anyone can bring items that are reusable—from clothing to appliances to construction materials and tools. Between 15-20 non-profits then take these items to help assist their organizations' needs. Of all items donated, 90 per cent find a new home. This is a fantastic example of a community-wide event to divert items from landfills and give them another use.

## Kent Regional Service Commission 6

**Recycling Diversion Rate of: 48.7%**

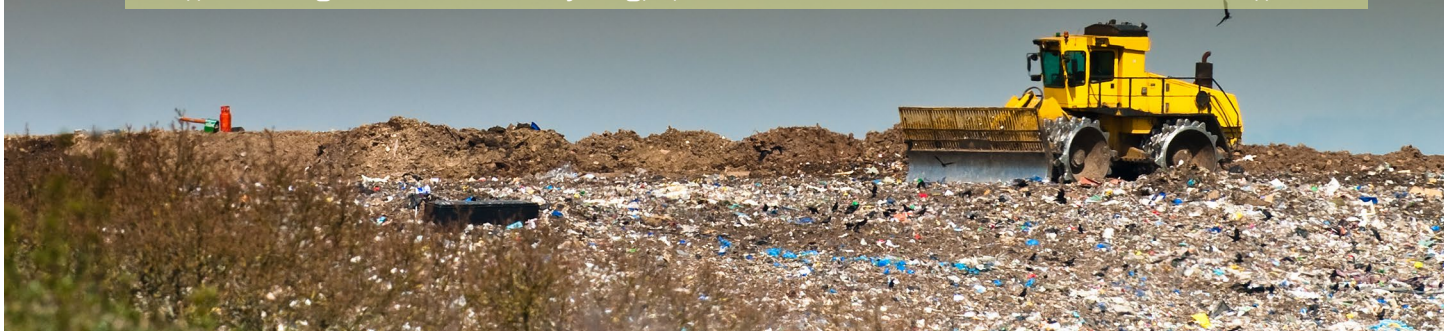
(2309 tonnes of Recyclables/ 4737 tonnes of Residential Waste)

**Compost Diversion Rate of: 54.3%**

(2575 tonnes of Organics/ 4737 tonnes of Residential Waste)

**Total Diversion Rate: 59.4%**

((2575t Organics + 2309t Recycling)/ (4737t Residential and 3485t Industrial Waste))



## Beyond the home

A circular economy really shines when it comes to commercial and industrial sectors.



A proud example in New Brunswick comes from the [Fundy North Fishermen's Association](#). The organization's 'ghost gear' project tracks fishing gear lost by lobstermen during storms or accidentally cut by ships travelling nearby. Retrieving this gear not only helps reduce the risk of whale entanglements but also helps prevent new traps from getting caught large 'tumbleweeds' of gear that can form under water. Traps that can be reused are returned to the lobstermen; unusable but still intact traps are used as retaining walls for landscaping; and, rusted, completely unusable traps are recycled.

The linear economy way of thinking is that waste, pollution, and overconsumption of materials is just an outcome of business. Some call it the 'take-make-waste' mindset.

That's not the way it has to be—and it's definitely not the way it should be.

There are multiple technologies, innovations, and policies within the framework of circular economy that assist communities, regions and countries in transitioning to a system where we're wasting less, reusing more, and conserving (and extracting less) natural resources.

The more stakeholders involved, the greater the strategy can be customized to fit their communities' needs.

New Brunswick's new [Extended Producer Responsibility](#) program (EPR) on plastic, packaging and paper is one of these milestone steps.

EPR is an environmental policy approach that makes the companies that create a product responsible for managing the product when it becomes 'waste' (in the traditional sense of the word—because in a circular economy, there's no waste, just opportunity!).

Basically, EPR puts companies legally responsible for collecting a certain percentage of their post-consumer goods instead of relying on residents to properly recycle them or municipalities to collect them as trash—creating landfill after landfill with taxpayer dollars.

EPR shifts the responsibility upstream, to the companies that made the products, creating a big incentive for those companies to design more reusable packaging and merchandise.

Currently, New Brunswick has three other EPR policies—for paint, oil, and electronics—in addition to a stewardship program for tires.

The Conservation Council of New Brunswick wants to help communities move toward a circular economy. You can learn more about this work by checking out our research paper, [New Brunswick's Waste Reduction and Circular Economy Journey](#), which reviews the province's current waste infrastructure, policies, and educational materials, looks at the obstacles being experienced in each region, and offers recommendations to build an environmentally-friendly and efficient circular economy.



Conservation Council of New Brunswick

T. (506) 458-8747

E. [info@conservationcouncil.ca](mailto:info@conservationcouncil.ca)



[www.conservationcouncil.ca](http://www.conservationcouncil.ca)

180 St. John Street

Fredericton New Brunswick

Canada E3B 4A9

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