Washington State Circular Economy

NORTHWEST BIOENERGY SUMMIT
— CIRCULARITY LANDSCAPE & FUNDING OPPORTUNITIES —
OCTOBER 15, 2024

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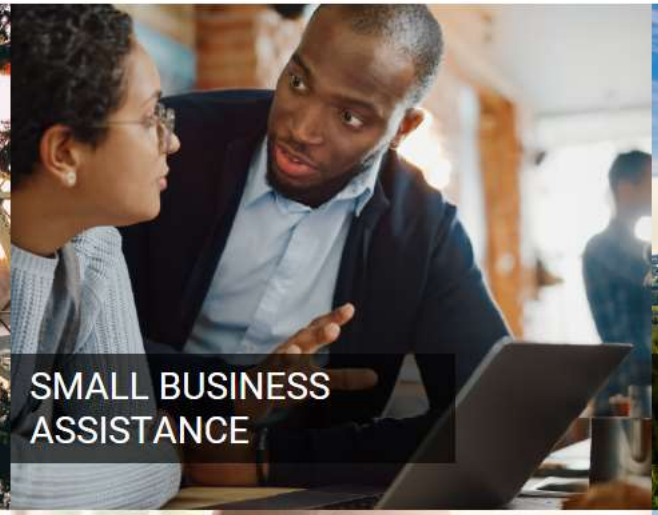
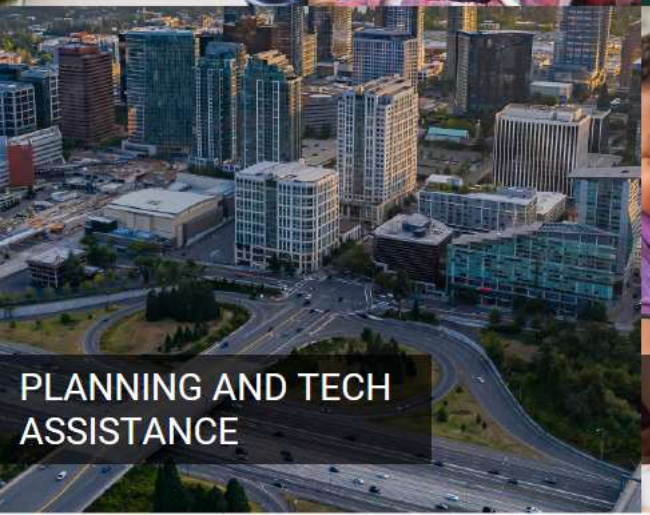
Office of Economic Development & Competitiveness | WA State Department of Commerce

Washington State Department of Commerce

We strengthen communities





Economic Development (OEDC)

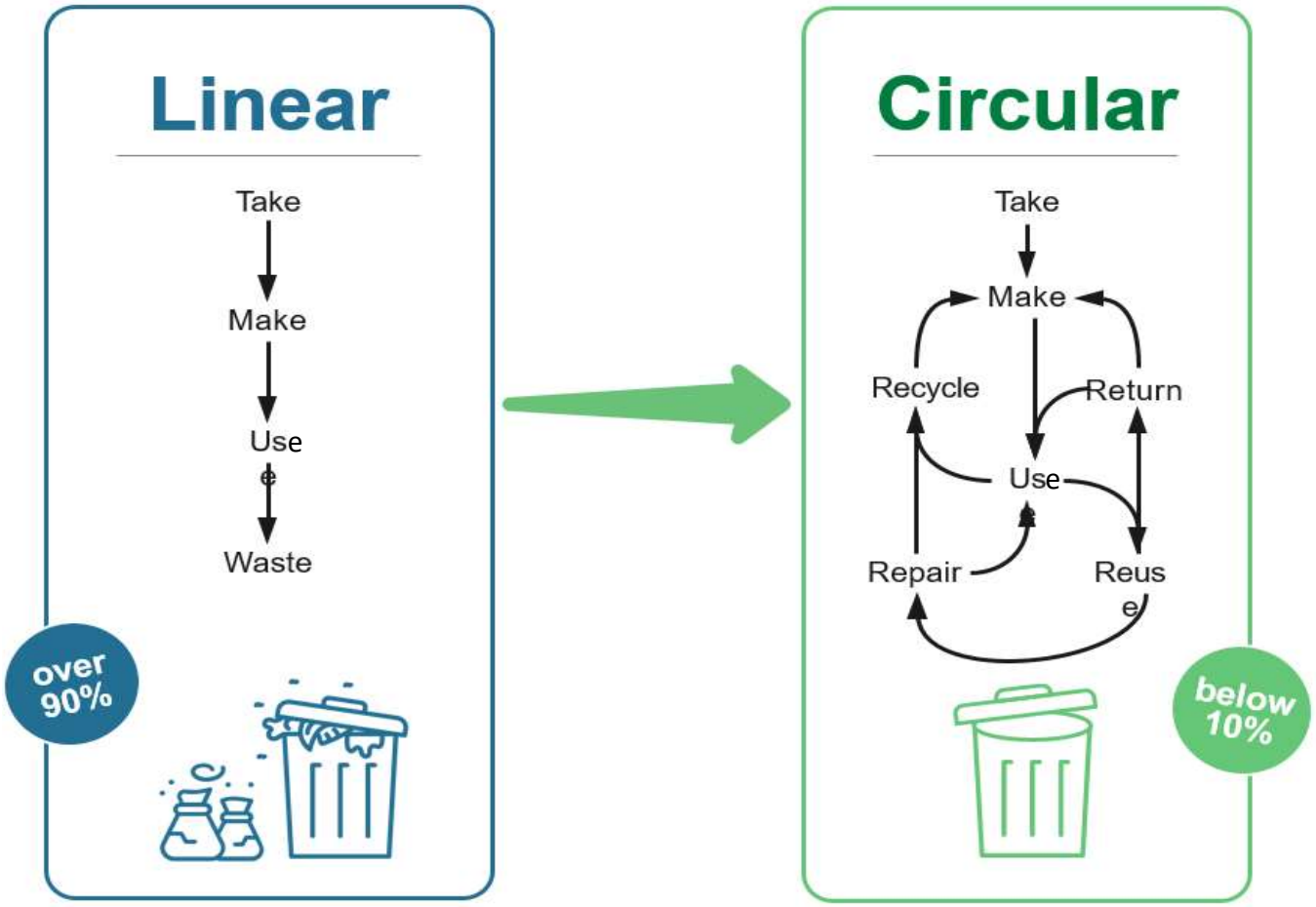
Serves as a think tank for reshaping the state's economy for decades to come.

Circularity and Symbiosis

Decoupling economic growth from the consumption of finite resources.

Why Circularity?

A circular economy **reduces** material use, **redesigns** materials to be less resource intensive, and **recaptures** "waste" as a resource to manufacture new materials and products.



*US EPA – National Recycling Strategy: [What is a Circular Economy?]

Image credit: NextCycle WA

Intentional Impact

Background and forward-thinking direction.

Policy changes

- Legislation – *Consumer and industrial waste*
- Municipalities – *China's 'National Sword' Policy*

Business

- Innovation – *Solutions from necessity*

Public

- Demand increase – *e.g. Plastic pollution*

An emerging ‘toolbox’

Programs and priorities

Industrial Waste Coordination Program (RCW 43.31.625) – *effective date: 7/25/21*

Industrial Symbiosis Grants (RCW 43.31.635) – *turning waste into value*

Recycling Market Development Center (RCW 70A.240.030) – *strengthening markets and processes*

Making connections – *helping to drive best practices*

Knowledge exchange – *importing and exporting innovation*

Emerging opportunities – *advancing the next industrial evolution*

Circular Economy Funding Opportunities

Washington State Department of Commerce

Industrial Symbiosis Program

Turning waste into value

Anaerobic digesters – for renewable natural gas (RNG)

Biochar – sequestering carbon while transforming ag and forest waste to renewable energy and soil amendments

Waste heat capture – wastewater treatment, data centers

Sustainable aviation fuel (SAF) – from forest and ag biomass, and CO2 capture

Bioplastics – Plant and waste-based compostable materials (e.g. packaging)

Built environment - adaptive reuse of materials (e.g. deconstruction)

Industrial Symbiosis Grant Recipients – 2022/23

Completed projects (FY23)

- **Inland Empire Paper,** Spokane – Transforming fly ash for delivery as a soil amendment using conventional farm equipment ($250,000)
- **Qualterra Inc.,** Cheney – Biochar production from ag/forest waste biomass while creating renewable energy ($245,416)
- **Myno Carbon**, Kettle Falls – Combine waste CO_2 with crushed basalt to create a liming agent beneficial to soil health ($250,000)
- **Chomp,** formerly Impact Bioenergy, Vashon Island – Waste heat capture, dry fertilizer and RNG development ($104,584)

OFFICE OF ECONOMIC DEVELOPMENT & COMPETITIVENESS

FACT SHEET

Industrial Symbiosis

Established in the 2020 legislative session to create:

"Valuable collaborative opportunities where the underutilized resources of one company may be used by another."

Industrial symbiosis includes waste, by-products, residues, energy and water. This program seeks to go beyond waste reduction by turning waste into a resource which benefits the producer and stimulates new business opportunities that support the circular economy.

Innovation is happening around the world to move this idea forward, and the state of Washington is ready to accelerate it.

This new program will look across the state to expand existing industrial symbiosis efforts, assist others that are on their way and support those still on the drawing board.

While there are different strategies to help businesses find new uses for their waste, the goal is the same: *to achieve mutual benefit between businesses and public entities (e.g. utilities) while reducing waste.*

One company's waste is another's resource

Businesses know their costs, whether they are related to supply chain, production or waste. Reducing waste saves money. Selling waste is even better. Senate Bill 5345 passed with nearly unanimous support, and signed into law in July 2021 (

The new law seeks to create networks and innovation hubs among Washington business, which will transform waste from one company into new products from another. This mutual benefit will lead to a more sustainable and integrated industrial economy.

Agency contacts:

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More information on industrial symbiosis, is contained in our 2019 report to the legislature: Washington Industrial Waste Coordination (Industrial Symbiosis) Program Recommendations.

Capitalizing on Opportunities

There are promising efforts throughout Washington state; some are working already, others are on their way, and still more are being considered:

- **Beta Hatch**, Cashmere, WA – Applying waste heat from nearby businesses to grow meal worms for livestock feed.

Washington State Department of Commerce

We strengthen communities

Industrial Symbiosis Grant Recipients – 2023/24

Completed projects (FY24)

- **Cascadia Produce**, Auburn – Food waste diversion. Establishing a retail rejection hub, distribution center and online marketplace ($250,000)
- **Qualterra Inc.**, Cheney – Biochar to renewable energy. Furthering biomass conversion and generating renewable energy ($206,857)
- **Waste Loop,** Leavenworth – Landfill diversion. Circular economy of materials and establishment of Reuse Innovation Center ($157,326)
- **Washington State University,** Pullman – Biochar in concrete. Diverting waste biomass to develop a durable, carbon-negative alternative for the construction industry ($235,817)

Current Funding Opportunity – up to $2.85M

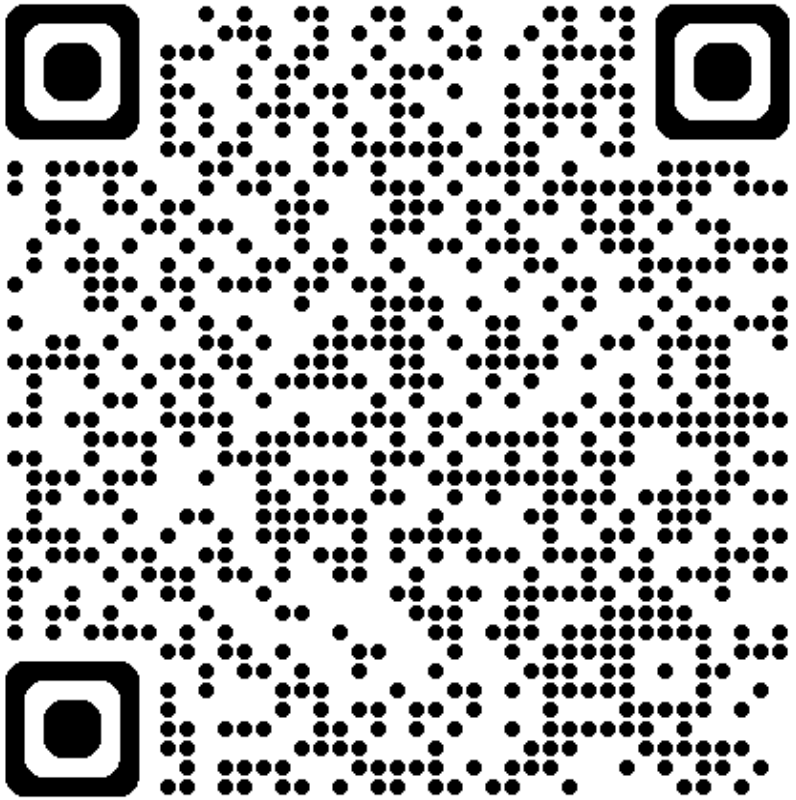
Now open! **Program Guidelines and Application form are available at:**
ChooseWashingtonState.com

Download (Word format), fill out all sections, and save completed file.

- Email complete Application to: **ISPgrants@commerce.wa.gov**
- Application submission deadline: **November 1st at 5:00pm PST**

For additional information, please contact our program team: **ISPgrants@commerce.wa.gov**

Current Funding Opportunity – Now Open!



[Industrial Symbiosis Program]

Takeaways

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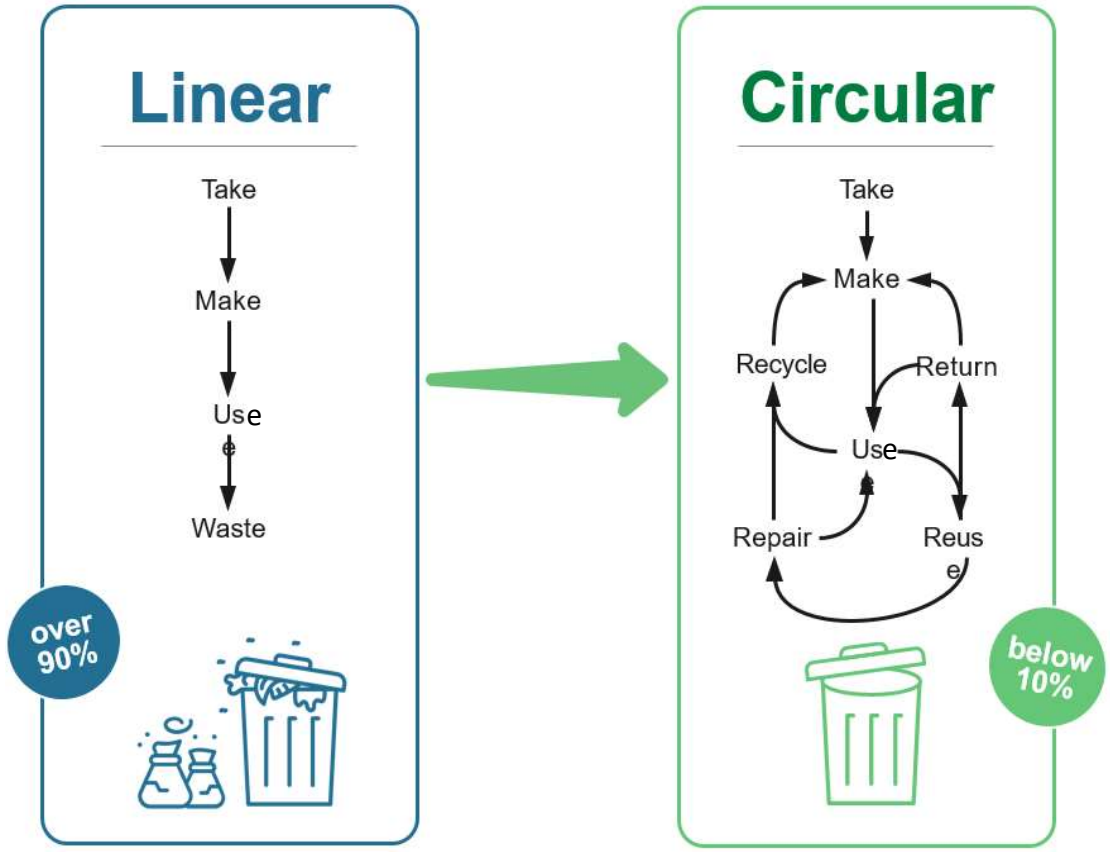
Continued Growth – Circular Economy

Key initiatives and projects underway

- **'24 Legislative Session** – $2.5M added funding for program expansion
- **'25 Budget Request** – $5M "plus-up" to further acceleration
- **Int'l Industrial Symbiosis Alliance** – Multinational collaborations
- **Circular States Network** – Continued buildout and funding initiatives
- **Plastic Bag Film Study** – Report to the Legislature
- **Eco-Industrial Parks** – Part of the next industrial *evolution*



Get Notified

Washington's Electronic Business Solution (WEBS)
Register to Receive Bid Notices

- Statewide contracting website for all companies doing business with the state
- Includes more than just notices of bids/grants but this is where to search and subscribe

Washington State Department of Commerce
Receive email updates (govdelivery.com)

- Commerce update subscription service
- All things Commerce including grant opportunities. You choose what to include in your updates. *There is a lot.*

Additional Programs

OEDC Highlights:

- Small Business Services - portal
- NextCycle Washington
- StartUp Washington
- Small Business Flex Fund
- Impact Washington
- Washington Small Business Development Center (SBD)
- Site Selection
  - Property search tool

More Resources

- **Washington's Electronic Business Solution (WEBS)**
- **Washington State Department of Commerce - govdelivery.com**
- FundHubWA (clean energy grants and incentives)

- NextCycle WA - Circular Funding Resource Guide
- Industrial Symbiosis Program
- Clean Energy Fund
- Industrial Site Readiness Grant
- Innovation Cluster Accelerator Program (ICAP)
- Evergreen Manufacturing Growth Grant
- Grow My Business - Startup Washington (mystartup365.com)
- Washington Department of Revenue - tax incentive programs
- Recycling Development Center
- Organics Management in Washington State
- Agricultural Symbiosis Report to the Legislature
- The North-West Symbiosis: Creating resource-efficient industries (white paper)

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www.commerce.wa.gov

Thank you.

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