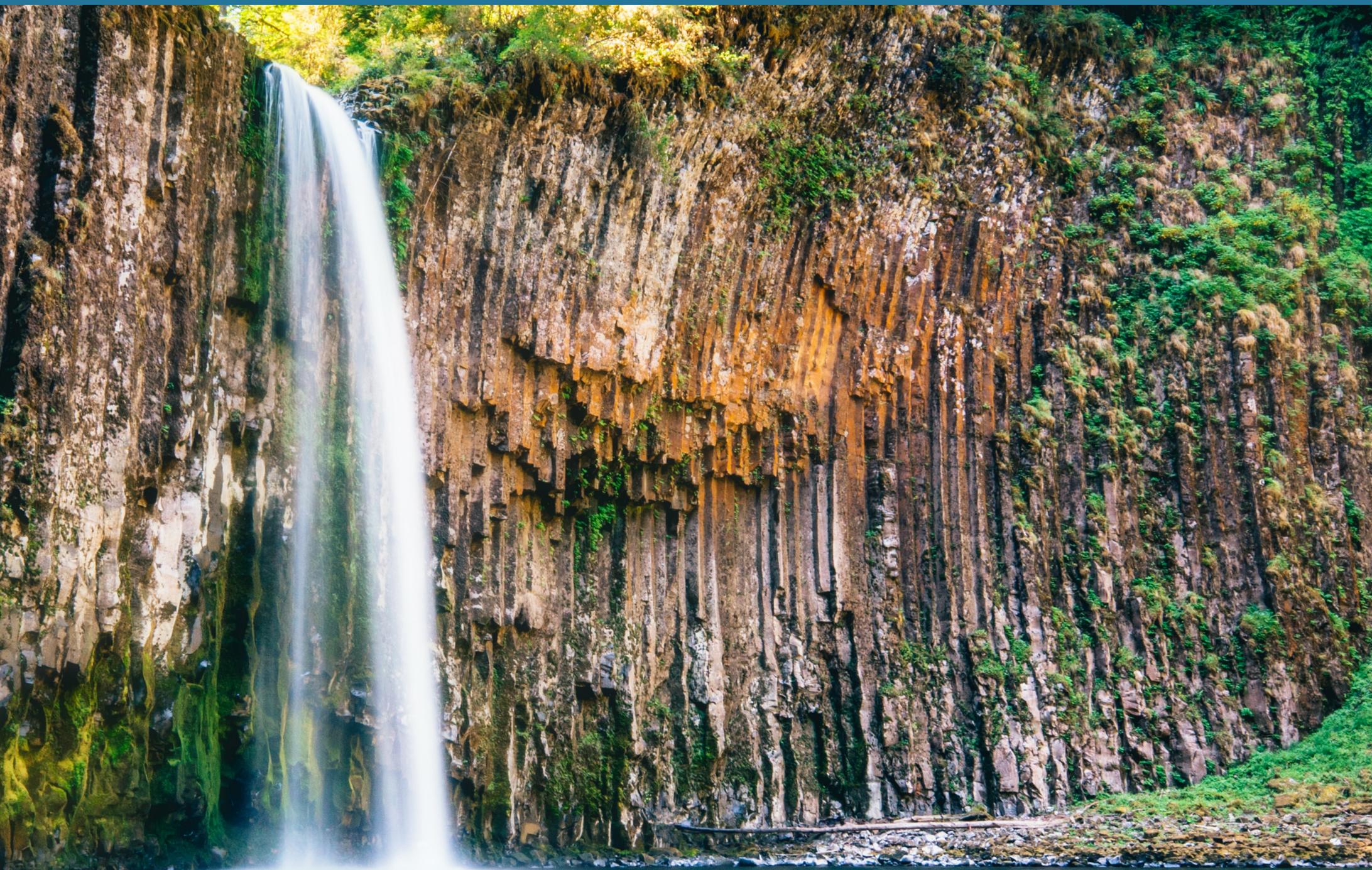


# Materials Management in Oregon

## DEQ Program highlights 2013-2019



State of Oregon  
Department of Environmental Quality



### 2050 Vision

Oregonians in 2050 produce and use materials responsibly, conserving resources, protecting the environment and living well

*Abiqua Falls, Marion County*



Crater Lake, Klamath County

## Getting to 2050

In Oregon, our way of life is deeply connected to the environment and natural resources. And for 50 years, the Department of Environmental Quality has worked to protect this identity. In 2012, with support from the Environmental Quality Commission, DEQ went a step further to lay the groundwork to protect Oregon's air, land, water and natural bounty for future generations to come by adopting **Oregon's 2050 Vision for Materials Management**.

Along with the 2050 Vision, DEQ developed **The Framework for Action** to provide a roadmap to achieving the Vision. It charts a course of action to create an Oregon where producers make products sustainably, Oregonians live within their share of the world's natural resources, and materials have the most useful life possible. It recognizes that materials, environment, and quality of life are linked.

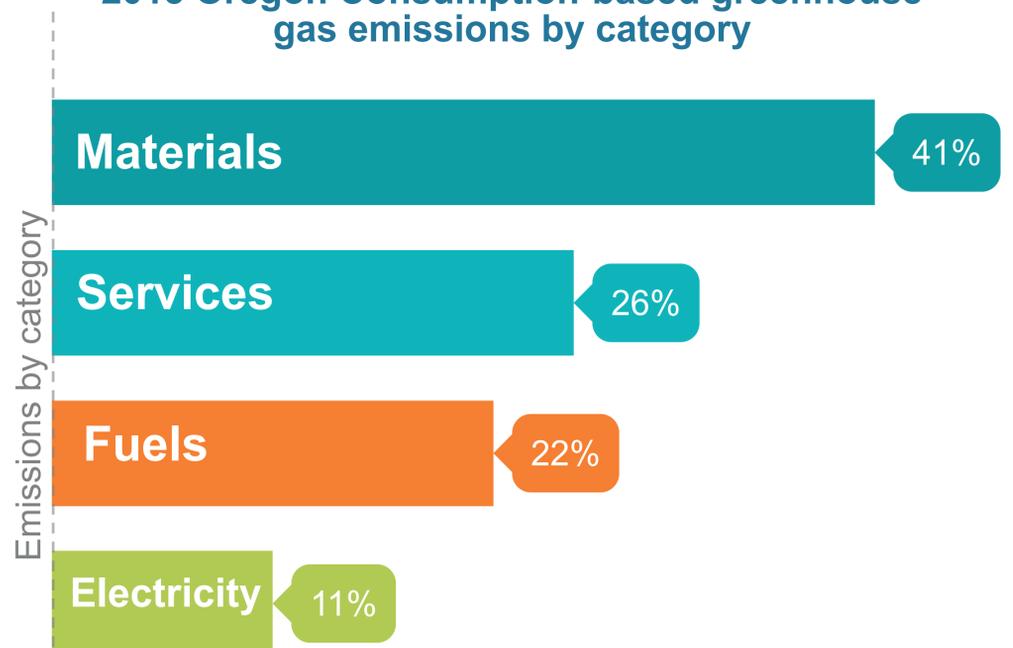
A lot has happened since the Vision was adopted in 2012. This report highlights some of our achievements – many made possible through the strength of partnerships – and helps us reflect on what we've done, and where we're going.

## Why materials matter

DEQ estimates that the consumption of materials contributes to approximately **41 percent** of all greenhouse gas emission in Oregon. Materials matter because they are central to our economy, our environment and our communities. The extraction, manufacturing, transport, use, and disposal of materials has profound impacts on the air we breathe, the water we drink, the productivity of our soils and the health of numerous ecosystems.

DEQ uses a holistic, lifecycle approach called "materials management" that seeks to reduce environmental impact by managing materials throughout all stages of their lifecycle.

2015 Oregon Consumption-based greenhouse gas emissions by category



## Desired Outcomes for 2050

- Producers make products sustainably. Every option is a sustainable option.
  - People live well and consume sustainably.
- Materials have the most useful life possible before and after discards.

# Program highlights since 2013

Color boxes represent where each item fits into the material life cycle.

## Upstream

Resource extraction, design, production, transportation

## Consumption

Materials use

## Full life cycle

All impacts

## End of life

Disposal and recovery

**ADU:** Accessory Dwelling Unit

**EO:** Executive Order

**EPR:** Extended Producer Responsibility

**LCA:** Life Cycle Assessment

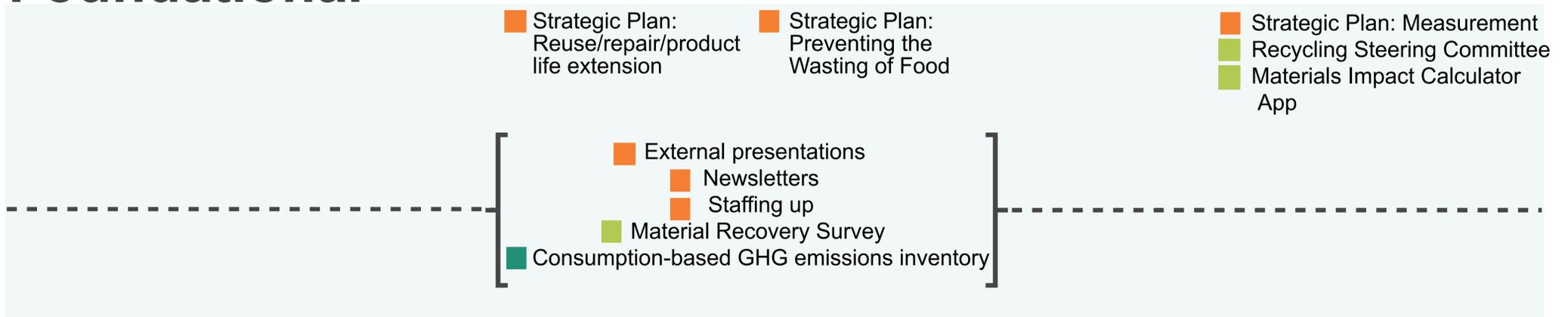
**MRO:** Maintenance, Repair, and Operations

**OASE:** Oregon Applied Sustainability Experience

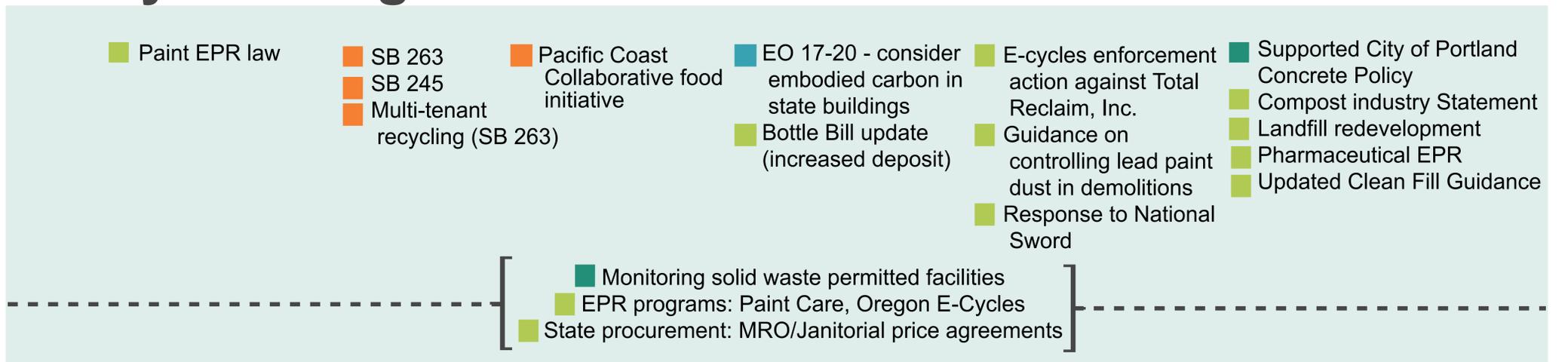
**OTR:** Opportunity to Recycle

**SB:** Senate Bill

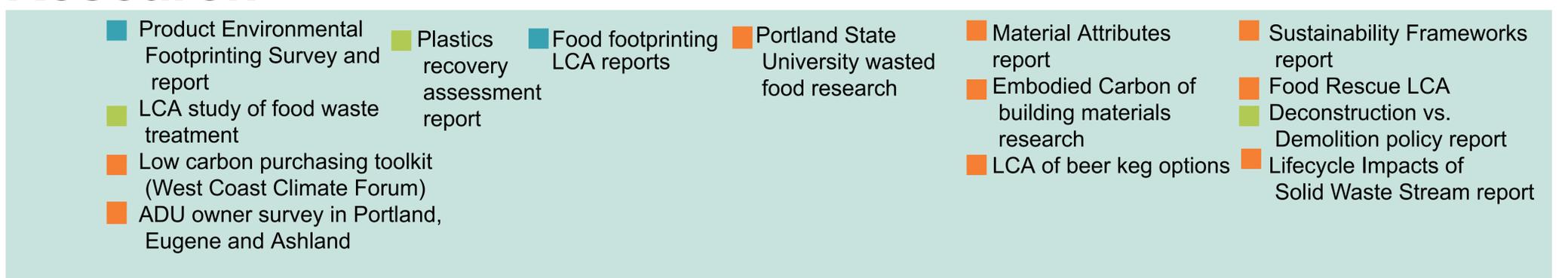
## Foundational



## Policy and Regulation



## Research



## Implementation through collaboration



2013/2014

2015

2016

2017

2018

2019

# By the numbers



State to: complete consumption-based emissions inventory; run a voluntary EPD program; support City of Portland's 1st in the nation policies around deconstruction and concrete purchasing.



Awarded through **74 grants** supporting projects that promote prevention, reuse, repair and recycling in Oregon.



Accessory Dwelling Unit (ADU) owners surveyed in Portland, Eugene, and Ashland as part of the first national survey of how ADUs are being used.



Schools DEQ visited to remove dangerous chemicals from science classrooms and train teachers on proper disposal.



Solid waste disposal sites DEQ monitors and inspects for environmental protection.



Environmental Product Declarations (EPD) for concrete published.



Pounds of electronic devices collected through the Oregon E-Cycles program.



Stakeholders engaged in **22 meetings** over **14 months** to help pass SB 263, 245.



Paid interns hired to reduce pollution at **20 Oregon businesses** (funded through the OASE intern program).



Restaurants that participated in DEQ's food waste prevention workshops in 2019.

## Thank you.

DEQ relied heavily on stakeholders to create the 2050 Vision for Materials Management in Oregon and to pass Senate Bills 245 and 263 through the 2015 legislature. These bills expanded DEQ's authority to work across the life cycle of materials, provided improvements to the opportunity-to-recycle laws, and created a more stable funding structure for DEQ's Materials Management program. This involved an enormous investment of time and energy from our stakeholders – for that, we thank you.

The 2050 Vision is intended to be a vision for Oregon, and we cannot achieve the vision alone. We will continue to partner with others to create a more sustainable future – a future where producers make products sustainably, Oregonians live within their sustainable share of the world's natural resources, and materials have the most useful life possible.

To learn more about DEQ's Materials Management program, visit <https://www.oregon.gov/deq/mm>.