



# SUSTAINABLE CONSUMPTION: WHY, WHAT, AND HOW?

Sponsored by:



# Sustainable Consumption: Why, What, and How?

Report from the Workshop: *The Role of Cities in  
Advancing Sustainable Consumption*

June 3, 2015

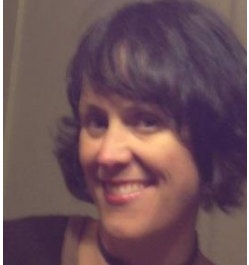
AOR conference

# Today's Outline



- Introduction and background
- Why? The case for sustainable consumption
- Pause for Q&A
- Roundtable: guiding principles from the Eugene workshop
- Wrap up and next steps
- More Q&A, discussion

# Today's Panel



Lauren Norris, Portland  
Bureau of Planning and  
Sustainability



David Allaway,  
Oregon Department of  
Environmental Quality



Babe O'Sullivan, Eugene  
Sustainability Office

# What is Sustainable Consumption?

*“...the use of services and related products which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life-cycle so as not to jeopardise needs of future generations.” (Oslo Symposium on Sustainable Consumption, 1994)*

- Basic needs
- Quality of life
- Improved material efficiency
- Reduced impacts
- Equitable prosperity



*Consuming less + consuming differently*

# The Workshop

## The Role of Cities in Advancing Sustainable Consumption

Oct. 29- Nov. 1, 2014



# Workshop Goals

*...shared understanding of the opportunities and challenges, potential next steps and additional research needs to **aid local governments in accelerating the transition to more sustainable consumption.***



# The Eugene Memo

## Framework for city action

- Making the case
- Guiding principles
- Next steps



### Eugene Memo: The Role of Cities in Advancing Sustainable Consumption November 2014

Cities in North America have an important role to play in building prosperity and wellbeing while promoting lifestyles that are compatible with the limits of natural systems. The consumption of materials and energy in high-income cities is a significant factor in driving climate change and resource depletion. Increasingly, government agencies, industry organizations and experts in the research community are calling attention to the need both to consume less and consume differently. Cities can and should take action to make this possible.

In October 2014, members of the Urban Sustainability Directors Network (USDN), the Sustainable Consumption Research and Action Initiative (SCORAI) and other policy experts met in Eugene (Oregon, USA) to review relevant research and explore the actions that cities could take to promote sustainable consumption and wellbeing at the municipal scale.

A clear consensus emerged from this dialogue: **to facilitate human and ecological wellbeing, we must transform the economy so that it serves what we value.** This objective is ultimately less about increasing material wealth and more about enhancing the hallmarks of the good life to which everyone aspires: time with family and friends; strong community ties; a sense of belonging; personal growth through new skills and knowledge; meaningful livelihoods, good health and other life-qualities that transcend mere income and material consumption.

Such a transformation requires a shift in cultural values and a re-design of urban economies and communities to reduce material and energy throughput while simultaneously improving the quality of life for all people. Advancing sustainable consumption in cities also entails supportive systemic change at the national and global levels: these multi-level changes enable the fundamental and necessary shifts in culture and markets that make the transition possible.

We need such powerful ideas to open a new way of advancing urban sustainability. Participants in the workshop came away committed to delving more deeply into potential municipal government strategies and to building a policy framework for new research and local action.

#### Why?

Urban sustainability initiatives are typically grounded in the principles of resource efficiency, conservation and stewardship, and we have all benefited from their successes. But with the compounding social and ecological problems we face, we must re-assess conventional solutions and identify those promising innovations that can foster more fundamental change.

*To begin, we acknowledge that an economic system dependent on continuous growth in material and energy consumption is fundamentally at odds with the very real limits of the natural systems available to support it. There is solid scientific evidence that the world is in ecological overshoot. Estimates suggest that we are currently consuming the equivalent of 1.5 times the resources and energy our planet can sustainably produce. Our expanding global economy brings with it a growing ecological deficit as the market fails to capture the true cost of such growth. Climate change, environmental degradation and resource depletion are symptoms of an economic system living*

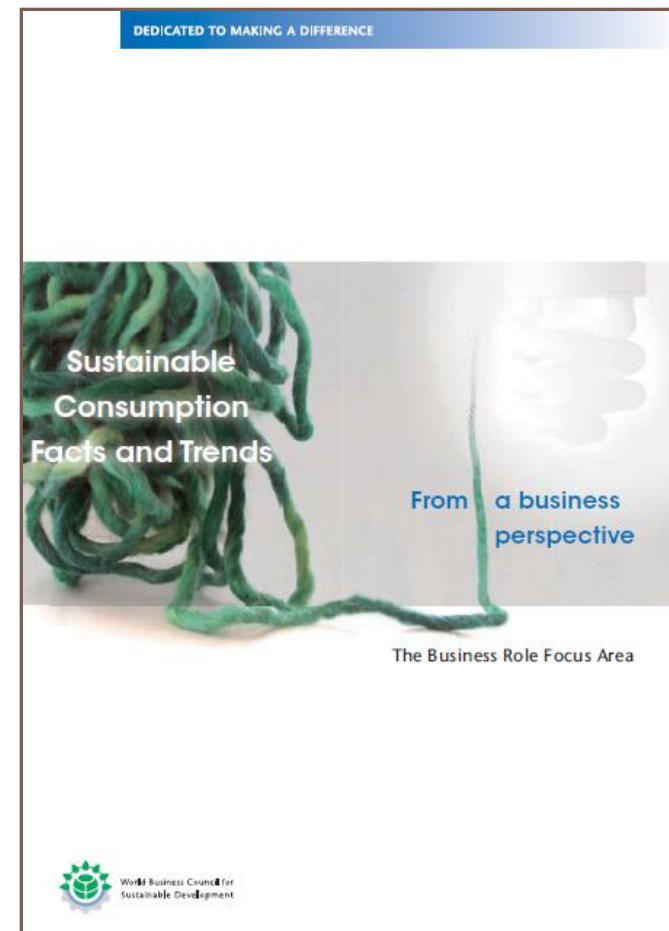




Why?

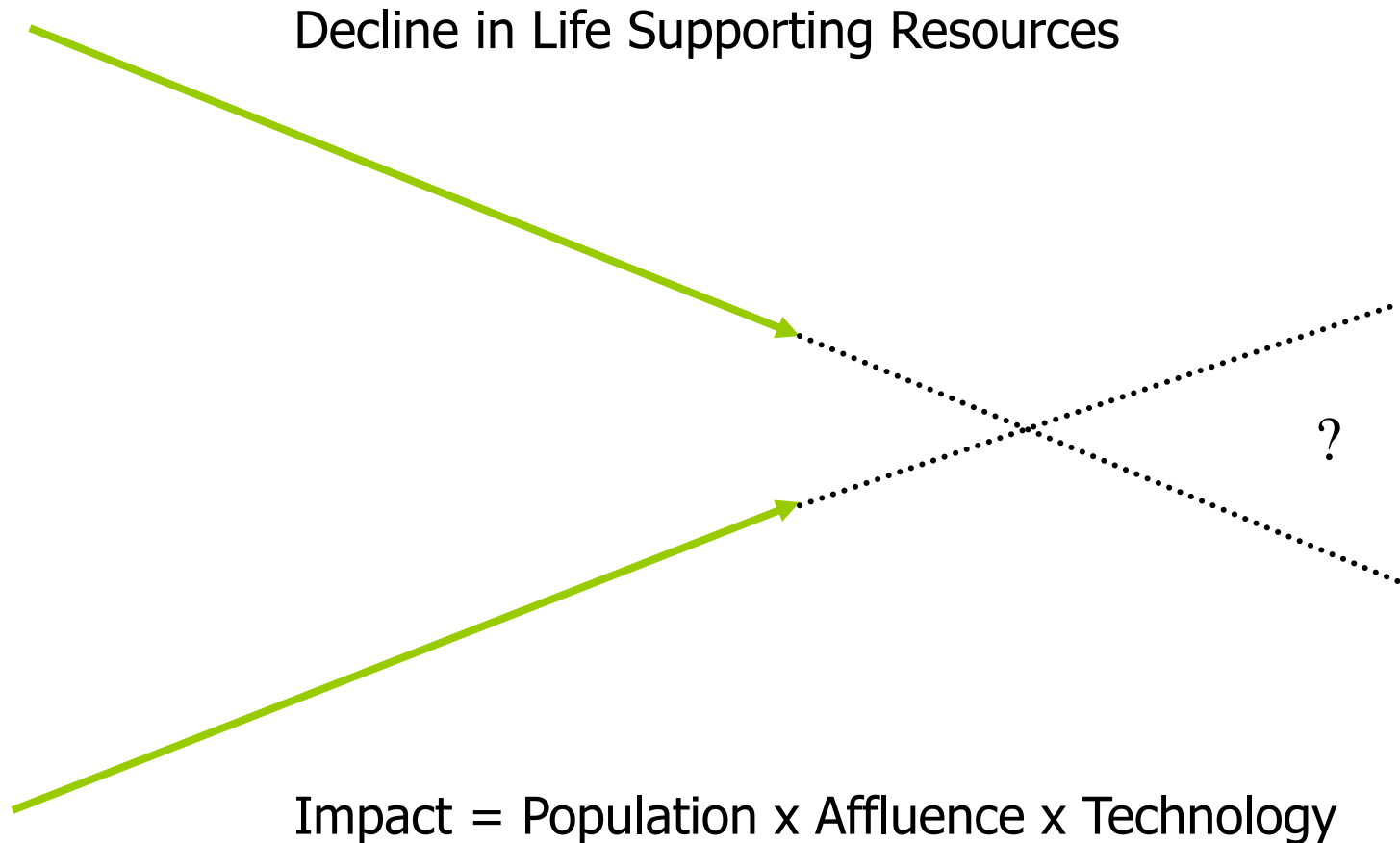
# Why?

- Economic systems dependent on continual growth are at odds with real limits of natural systems
- Current North American consumption levels cannot be replicated on a global scale
- Technology advances alone will not solve the problem



# “The Funnel” – A System at Risk of Collapse

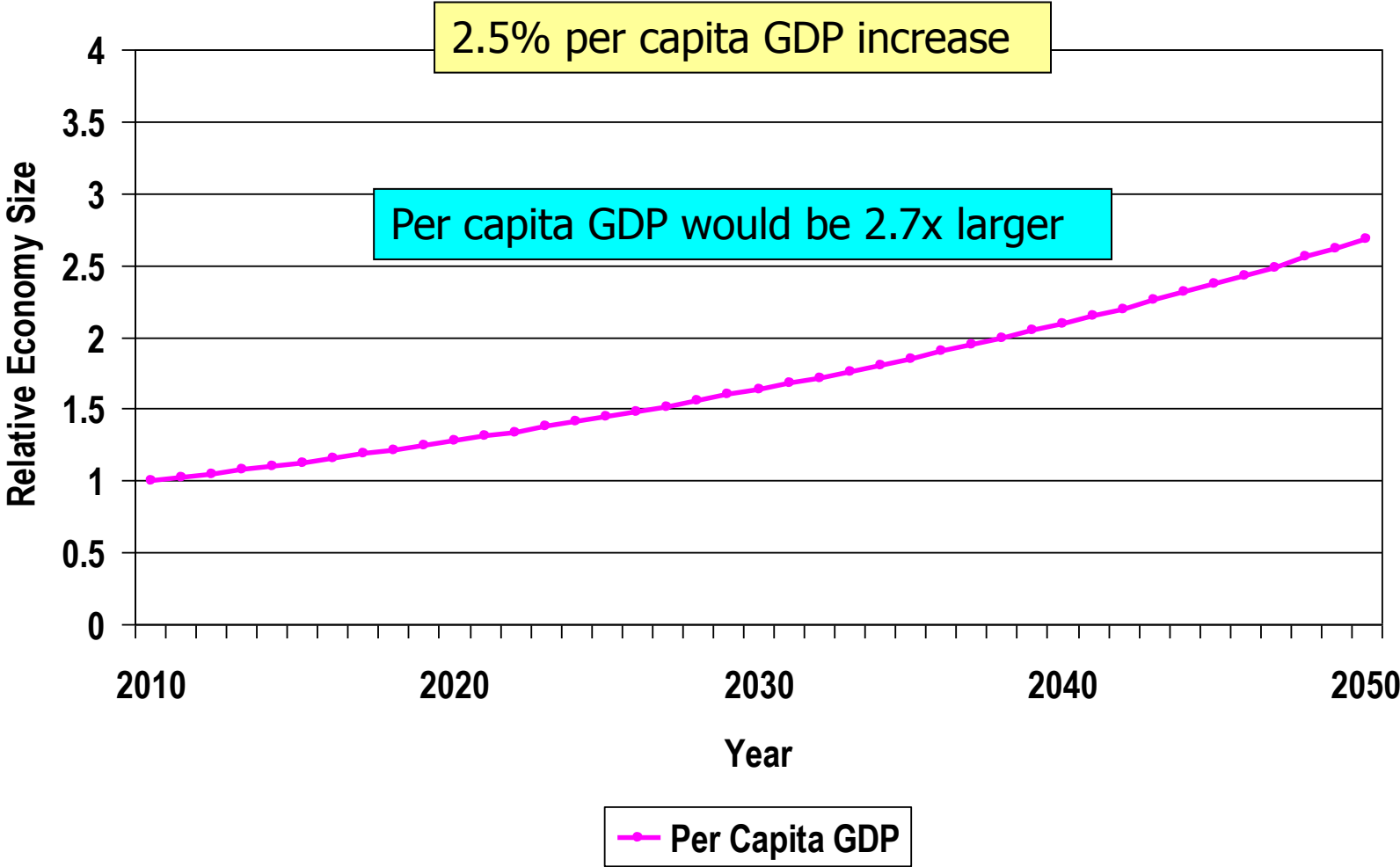
*Special thanks to Duke Castle for content in the following slides*



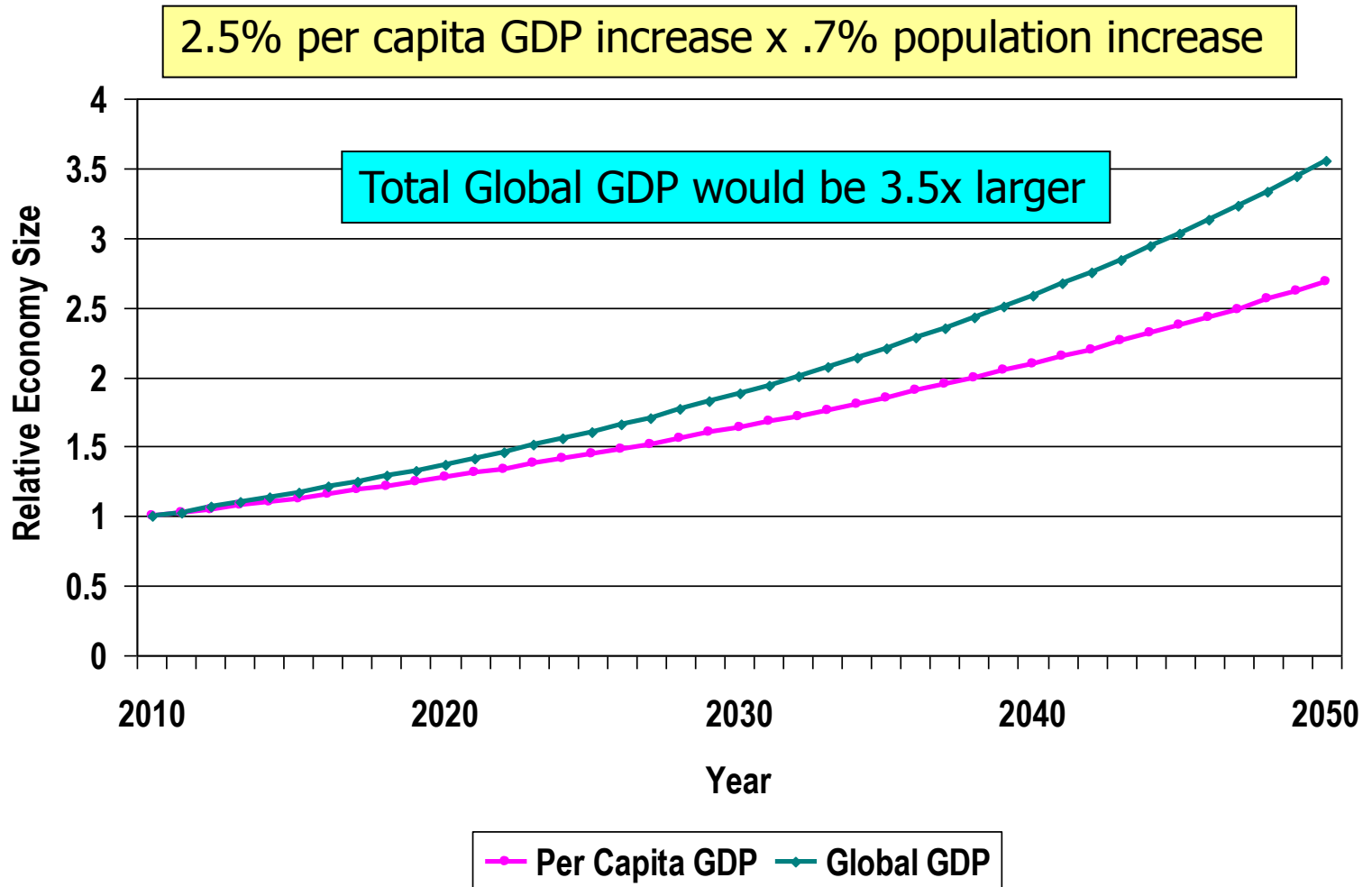
# Global Economy – Recent Predictions

- **Affluence:** International Monetary Fund (IMF) estimates global output per capita will grow 2.5% annually
- **Population:** projected to grow ~0.7% annually until 2050
- **Technology:** Resource use per GDP decreased 30% over last 30 years (1.2% improvement per year)

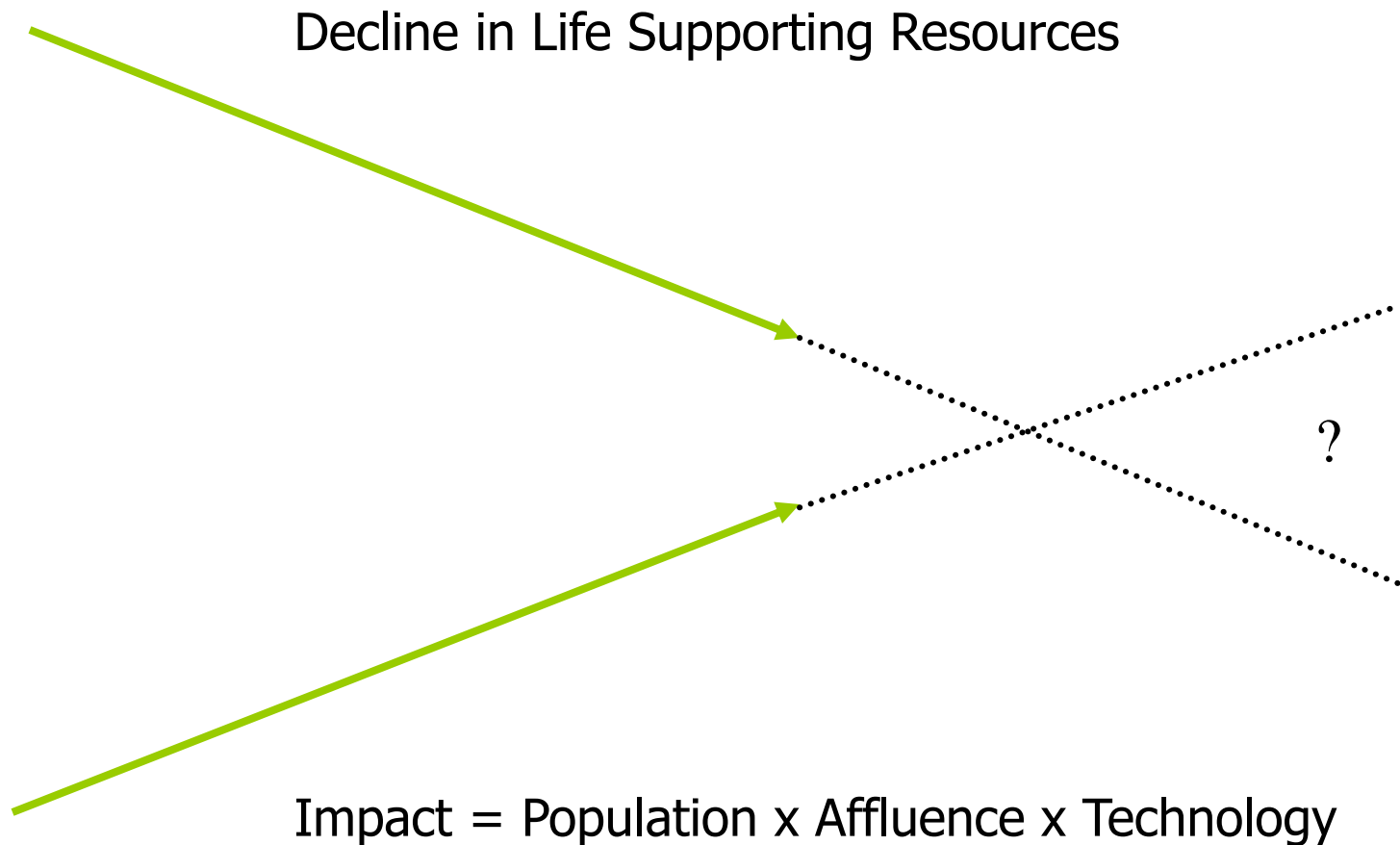
# Affluence: Projected Global GDP



# Affluence x Population: Projected Global GDP

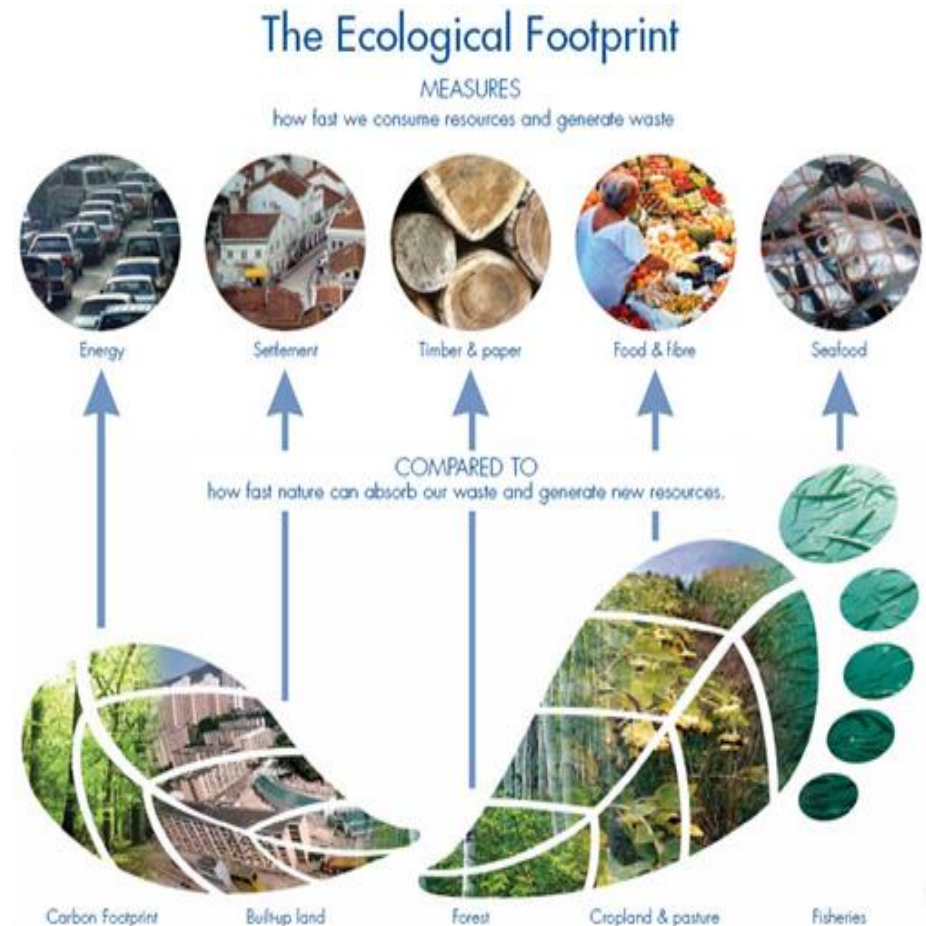


# “The Funnel” – A System at Risk of Collapse



# Use of Life-Supporting Resources: The Ecological Footprint

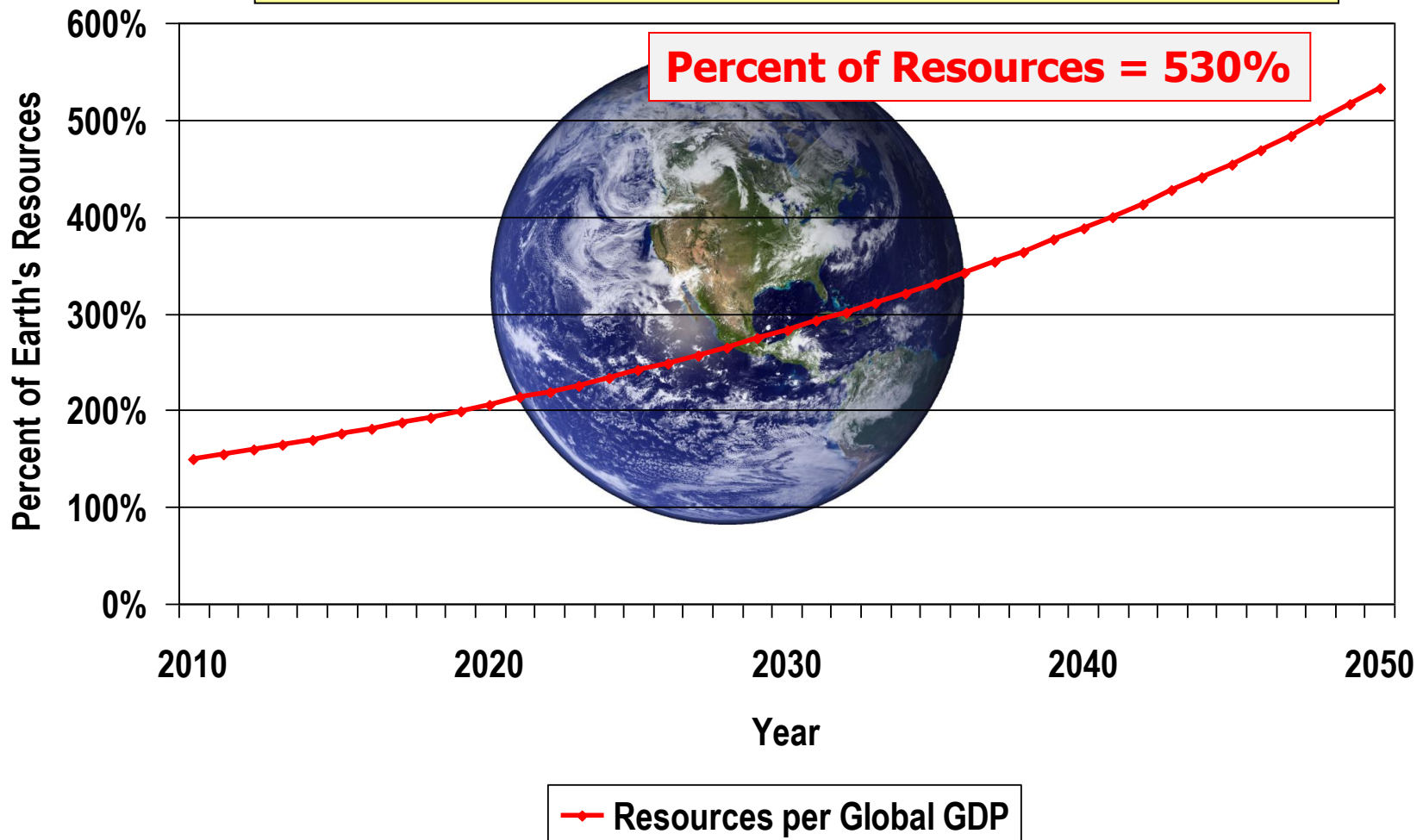
- Measures how much land and water area to support human consumption.
- Current global footprint is ~1.5 earths.
- “Overshoot”: we use 150% of the assets nature produces in a year. (Another form of debt)
- US per-capita global footprint is ~4.5 earths





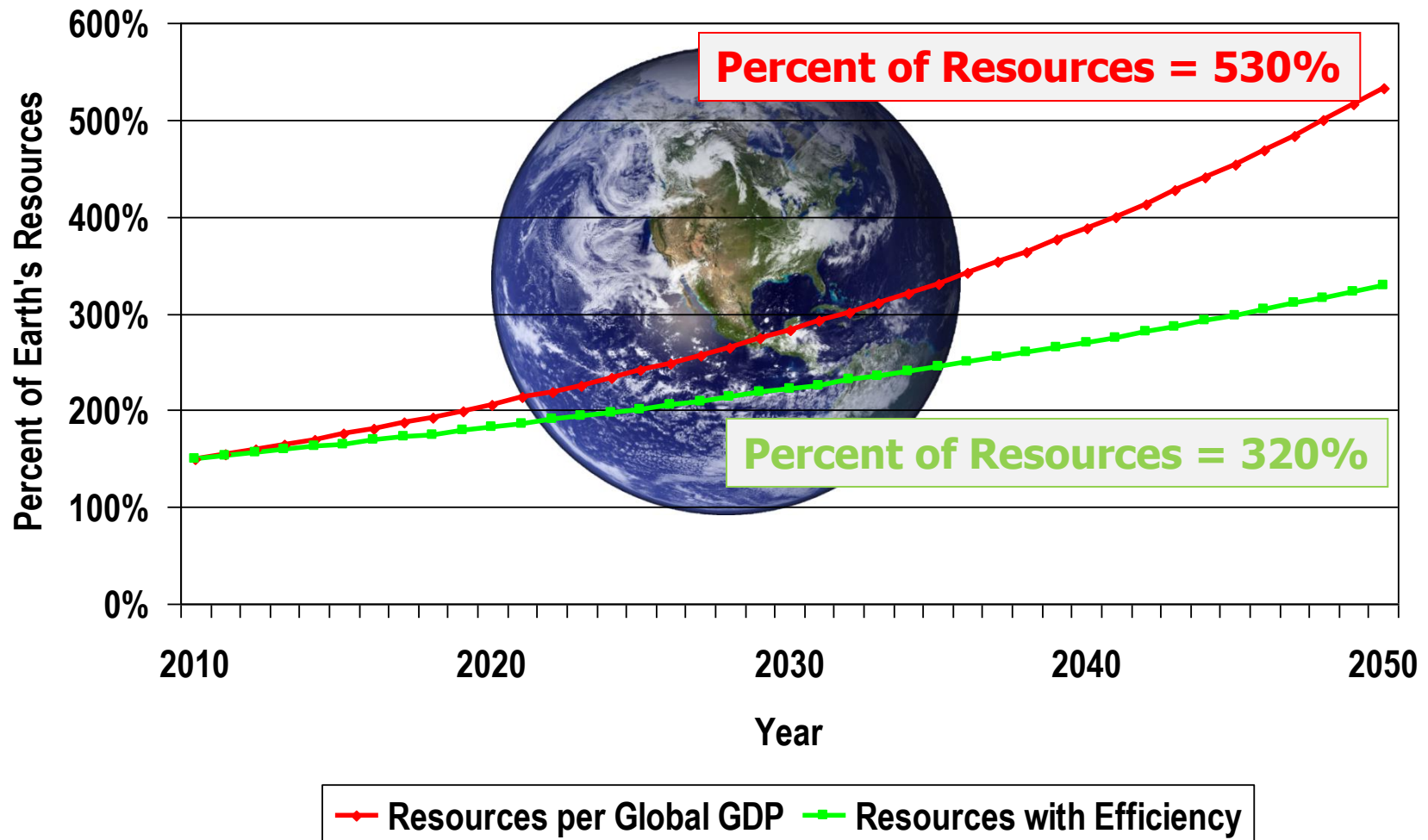
# Resources Needed to Support Global GDP

2.5% per capita GDP increase x .7% population increase



# Resources Needed to Support Global GDP

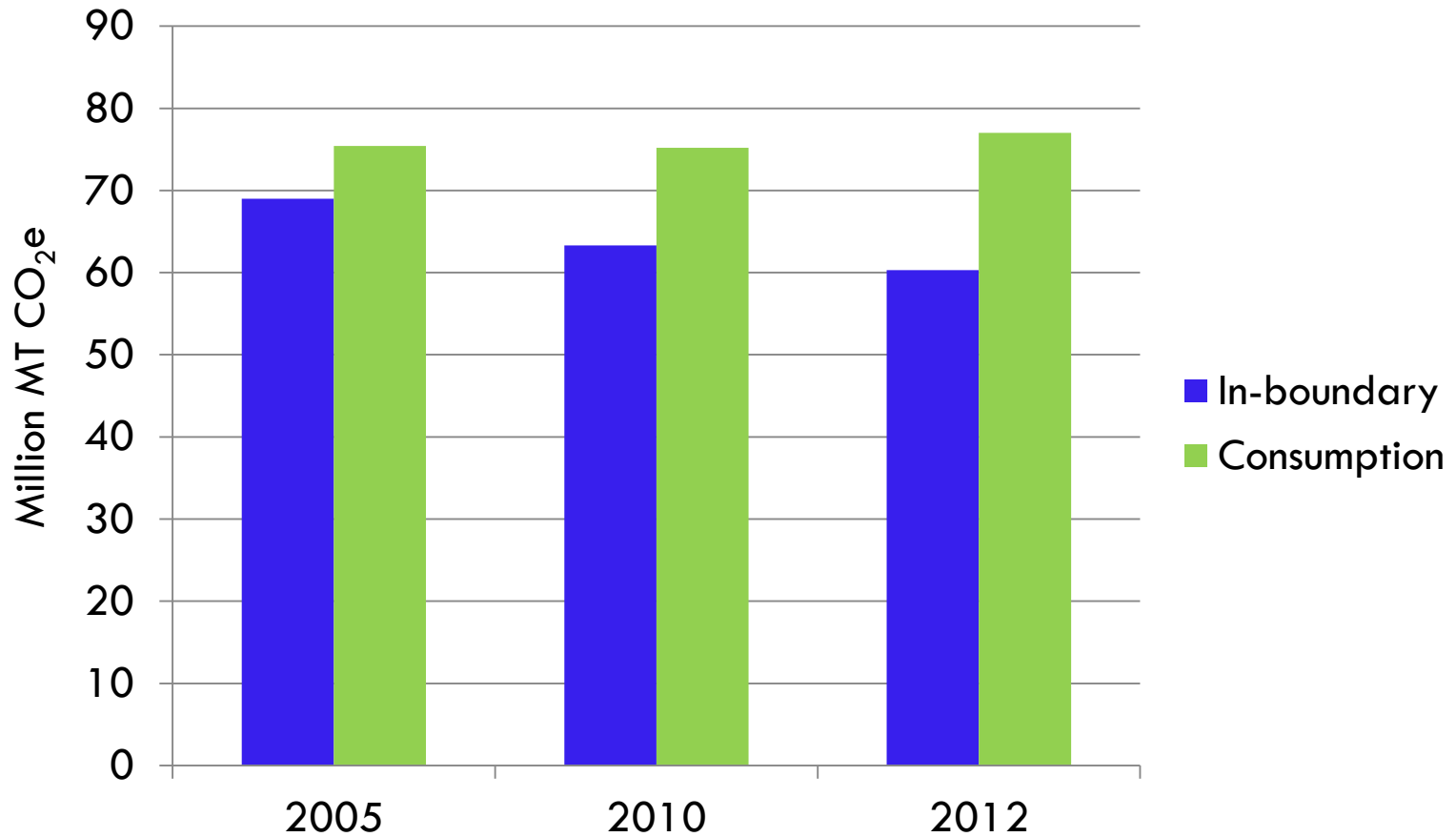
2.5% per capita GDP x .7% pop. x 1.2% efficiency



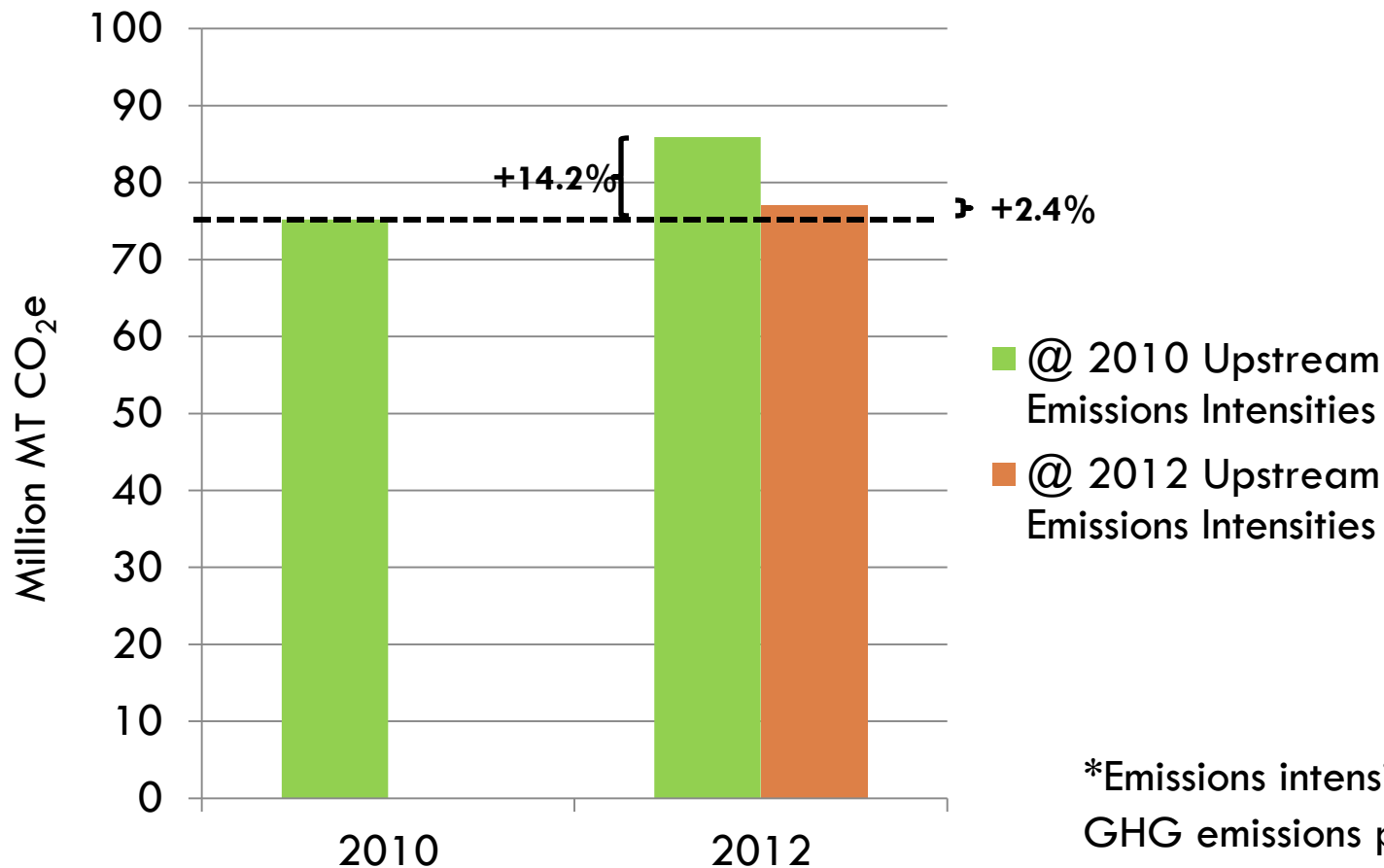
# Why is Technology (Alone) Insufficient?

- Magnitude of overshoot requires very large improvements
  - unclear if technology (alone) can produce the needed reductions in impact
- Rebound effects
- Benefits resulting from technological improvements can be overwhelmed by increases in overall consumption

# Oregon Greenhouse Gas Emissions



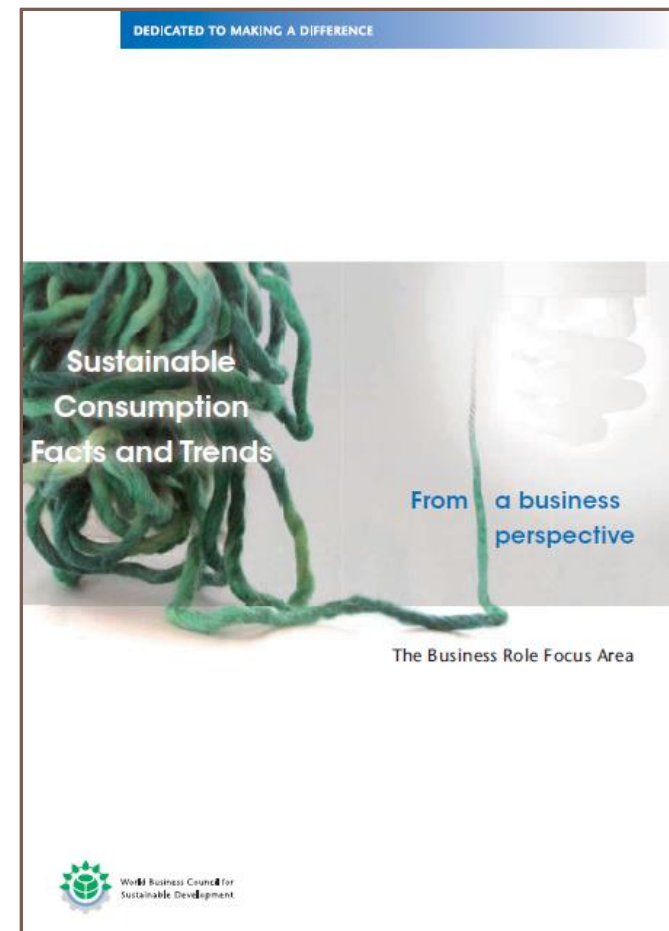
# 2010 vs. 2012 Oregon Consumption-Based Greenhouse Gas Emissions with 2010 vs. 2012 Upstream Emissions Intensities\*



\*Emissions intensity = GHG emissions per dollar of economic output

# Why?

- Economic systems dependent on continual growth are at odds with real limits of natural systems
- Current North American consumption levels cannot be replicated on a global scale
- Technology advances alone will not solve the problem
- **Public benefits (and interests) in sustainable consumption**



# Why?



Professor Bill Rees, University of  
British Columbia

[Plenary Session 2 - YouTube](#)



Questions?





# Roundtable Discussion

# Eugene Memo: Guiding Principles

1. Envision prosperity as a holistic, integrated concept
2. Commit to equity and social inclusion
3. Enhance social capital and resilience
4. Advance sustainable local economies
5. Keep the big picture in mind and work toward the long-term
6. Collaborate with diverse partners
7. Experiment and learn
8. Set goals and measure
9. Combine structural and systemic change with education
10. Take action and leadership

A decorative horizontal bar at the top of the page, consisting of an orange square on the left and a blue rectangle extending to the right.

Advance sustainable local economies

# Advance sustainable local economies

## Challenges

- Threat to the retail base?
- Sales tax revenues

## Opportunities

- Changing demand and ownership patterns
- New business models



# Advance sustainable local economies

## *Economic impacts*

<b>Reuse, repair and rental industries</b>	<b>Minnesota</b>	<b>Portland</b>
Gross sales/yr.	\$4 billion	\$1.1 billion
Employment	46,000	9,140
% GDP	1.6	1

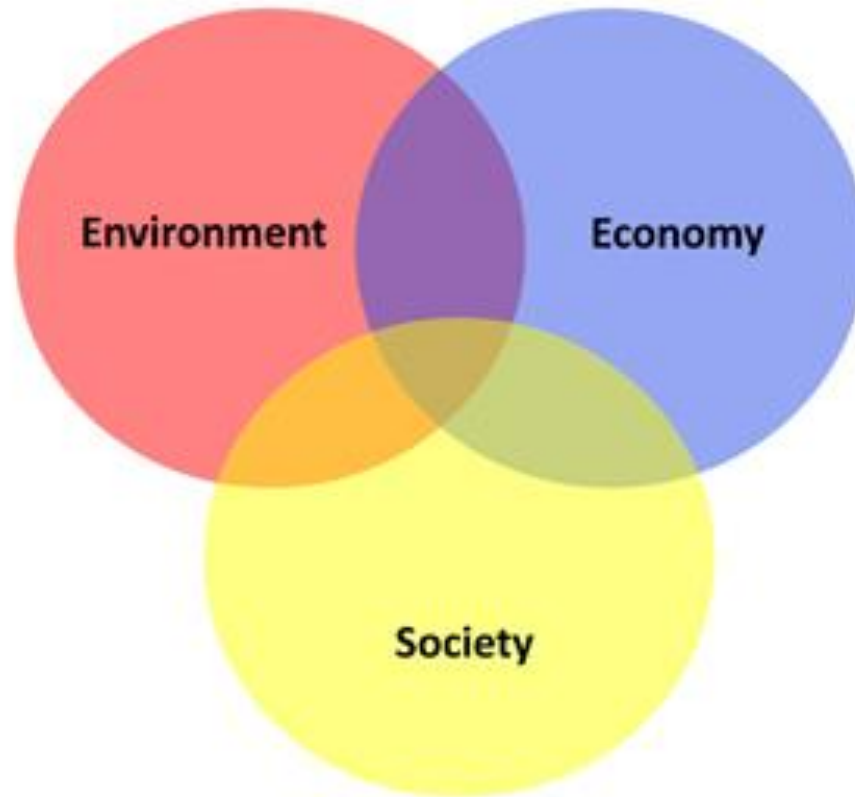
# Advance sustainable local economies





# Commitment to Equity

# Social \_\_\_\_\_ ?





# Commit to Equity

**Equality**



**Equity**



- Fair shot of success for essential needs, health and well-being
- Benefits and burdens are shared
- All participate in the common good

# What Commitment Looks Like

- Understand the disparities
- Co-Creation and collaborative action
- Measure impacts equitably
- Create opportunity for common wealth building





Combine structural and systemic change  
with education

# Limitations of “Education”

- The “rational choice model” doesn’t explain consumer behavior
  - ▣ Providing information (alone) typically doesn’t change behavior (by much)
  - ▣ People have limited time and cognitive limitations on their ability to deliberate
  - ▣ Behaviors are driven by habits, emotions, biophysical forces
  - ▣ Behaviors may be constrained by lack of access to the better option
- May require broader structural changes; relying just on individuals may be counter-productive

# “Love Food, Hate Waste”

## FISH LOVERS hate waste

Nothing's better than a nice bit of fish. So I always keep an eye on the use-by date. If it's getting close, I'll either freeze it, or use it. Perfect.

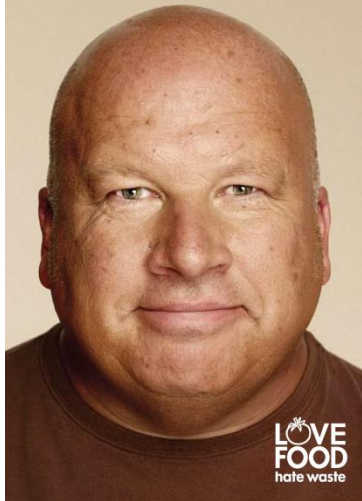
[lovefoodhatewaste.com](http://lovefoodhatewaste.com) has more tips and recipes to help you waste less food and save almost £60 a month.



## POTATO LOVERS hate waste

I love spuds. I store mine in a cool dark place to make them last longer. Any sprouty ones get a good peel and are perfect for mash. Lovely jubbly.

[lovefoodhatewaste.com](http://lovefoodhatewaste.com) has more tips and recipes to help you waste less food and save up to £50 a month.



## APPLE LOVERS hate waste

Apples are simply my favourite fruit. I always put them in the fridge so they last longer and are great in smoothies. Delicious.

[lovefoodhatewaste.com](http://lovefoodhatewaste.com) has more tips and recipes to help you waste less food and save up to £50 a month.



## PASTA LOVERS hate waste

Me and the kids love pasta. I save any leftovers for lunch the next day, with cherry tomatoes, tinned tuna and a bit of mayo. Perfect.

[lovefoodhatewaste.com](http://lovefoodhatewaste.com) has more tips and recipes to help you waste less food and save almost £60 a month.



## LAMB LOVERS hate waste

I love my lamb leftovers. Kept in the fridge, they're good for two days and great in a thick sandwich with lots of mint sauce. Job done.

[lovefoodhatewaste.com](http://lovefoodhatewaste.com) has more tips and recipes to help you waste less food and save up to £50 a month.



## Moving forward

7. Experiment and learn
5. Keep the big picture in mind and work toward the long-term
8. Set goals and measure

A decorative horizontal bar at the top of the slide, consisting of an orange square on the left and a blue rectangle on the right.

Experiment, Innovate and Learn

# Advancing Sustainable Consumption

- Dig into Research
- Willingness to try new things
- Monitor, evaluate and change
- Share lessons learned
- Make mistakes and learn from them
- Involve completely new stakeholders
- Embrace emergence of new directions



# Consumption Needs a New Paradigm

---

**NOTHING**

**NOTHING**

# Go-to Activities

-  **BUY SMART**
-  **REUSE**
-  **BORROW & SHARE**
-  **FIX & MAINTAIN**

# Splitting Discards from Consumption

## Be Cart Smart

**EACH CART PLAYS A PART**



## Resourceful PDX



# Measuring Sustainable Consumption Infrastructure

- Repair
- Reuse/Resale
- Sharing, Rental, Lease, Borrowing
- Clothing, shoes, and accessories.
- Furniture.
- Tools and appliances.
- Sporting equipment and toys.
- Media, information, music, movies, games, and books (physical and digital).
- Building materials.
- Food.
- Transportation.
- Accommodation, lodging, and housing.

# New Policy Might Require a Split

---

- Recovery plans
- Sustainable Consumption and Manufacturing plans



Keep the big picture in mind and work  
toward the long-term

# Be strategic and keep the long-term in mind

- Target efforts at appropriate level
- Consider short- and long-term effects, local and global consequences
- Take advantage of interactions across scales



# Be strategic and keep the long-term in mind

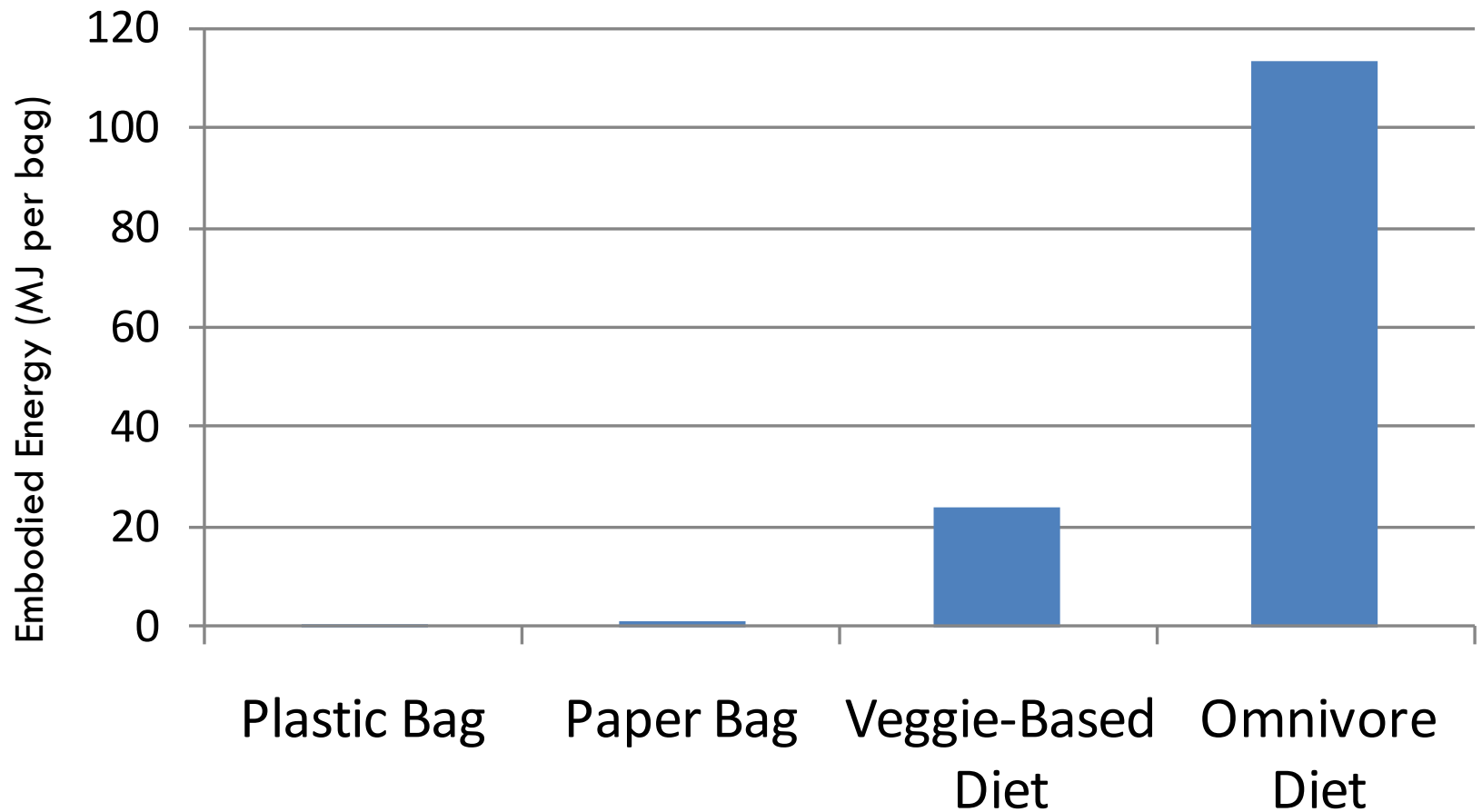
- Target efforts at appropriate level
- Consider short- and long-term effects, local and global consequences
- Take advantage of interactions across scales



ADU from Spring, 2013 ADU Tour



# Grocery bags: important or not?



# Be strategic and keep the long-term in mind

- Target efforts at appropriate level
- Consider short- and long-term effects, local and global consequences
- Take advantage of interactions across scales



ADU from Spring, 2013 ADU Tour

A decorative horizontal bar at the top of the slide, consisting of an orange square on the left and a blue rectangle on the right.

# Set Goals and Measure

## 8. Set goals and measure

*“Reduce consumption-related emissions by encouraging sustainable consumption and supporting Portland businesses to minimize the carbon intensity of their supply chains.”*

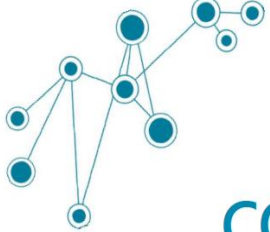
Portland 2105 Climate Action Plan

*“Collaboration, sharing, repair and reuse are all normal, and sustainable consumption is a social norm that is easy to live by...All choices are good choices; highly unsustainable products are no longer sold.”*

Materials Management in Oregon 2050:  
Vision and Framework for Action


# 8. Set goals and measure

- Measuring Consumption and its impacts
- Tracking changes in consumption
- Adopting alternative measures
  - ▣ Genuine Progress Indicator
  - ▣ Gross Happiness Index



## SUSTAINABLE CONSUMPTION AND CITIES

Approaches to measuring social, economic, and environmental impacts in cities



**CASCADIA** CONSULTING GROUP | **USDN** | urban sustainability directors network

This report summarizes literature and presents approaches for understanding and quantifying the scope and impact of sustainable consumption activities, with a focus on repair, reuse, and rental of household goods and clothing; tool-lending libraries; and transportation ride-sharing



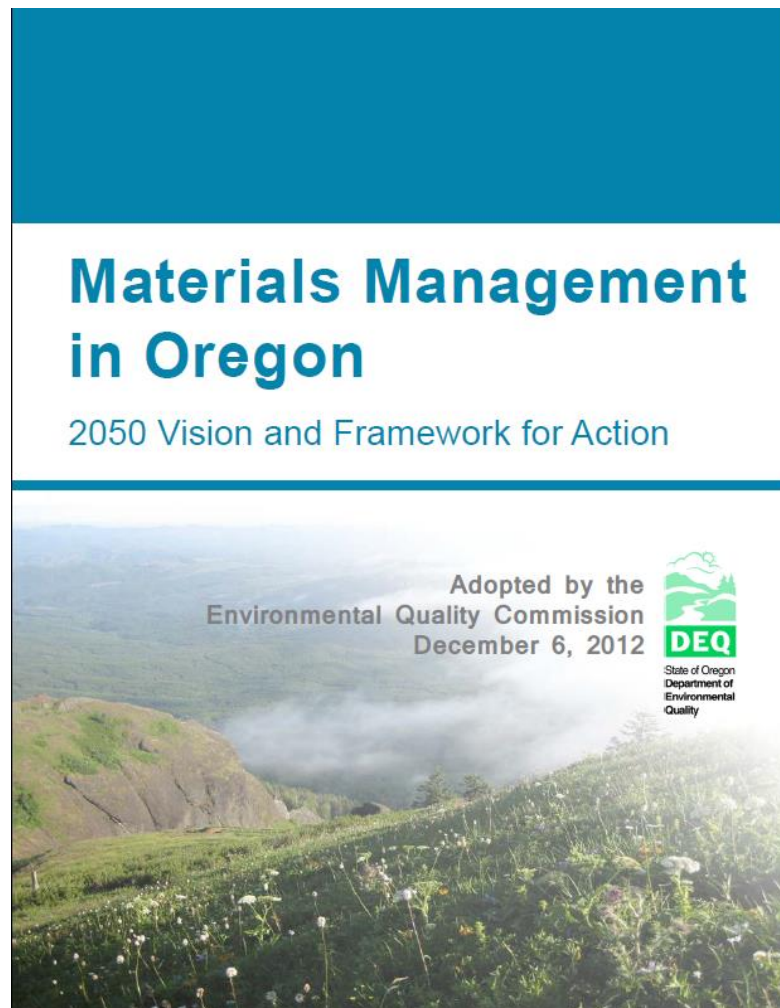
What's Next?

# Sustainable Consumption: Phase 2

- Building the field among cities
  1. Capacity building workshop
  2. Toolkit of resources
- Toolkit
  - Framing and communication
  - Measurement tools
  - Policy options
  - Addressing equity
  - Decision filter
  - Clearinghouse of resources

# Sustainable Consumption in Oregon's 2050 *Vision for Materials Management*

- Reuse/repair/product lifespan extension
- Food waste prevention
- New waste prevention and reuse program elements (SB 263)
- Grants
- Consumption-based GHG emissions inventory and ecological footprint
- And more





# What is Sustainable Consumption?

---

Terry Moore, EcoNorthwest

[Terry Moore explains what sustainable consumption means to him - YouTube](#)



# Questions and Discussion