CHAPTER 4 EQUITY AND MATERIALS

INTRODUCTION

n the materials management and sustainable consumption chapters we learned that humans both carry the burdens and enjoy the benefits from the production and consumption of materials.

We learned that all the stuff we consume has negative impacts for humans all along the materials life cycle. These negative impacts include: poisoned drinking water near extraction sites, risks to workers in manufacturing facilities, toxins in consumer products, and conflict and displacement caused by climate change.

We also learned that life expectancy and sense of life satisfaction are dependent on having a certain level of material necessities such as food, shelter, medicine and art and literature.

What has not been discussed to this point is that the benefits and burdens of consumption are distributed inequitably between differing populations and that this inequity is a great threat to sustainability.

This chapter will define equity and explore how institutional racism and poverty result in the inequitable distribution of the benefits and burdens of materials production and consumption. Materials production and consumption have the largest negative impacts on low-income communities and people of color. Meanwhile, those same people have less access to products that provide health and wellbeing.

This chapter will demonstrate the importance of addressing these inequities as we work to build new systems. Oregon's materials management vision takes a holistic view of environmental and social well-being and health across the full life cycle of materials. As we change how we produce and consume, we have the opportunity to ensure that this is done collaboratively so that communities of color and lowincome communities are co-creators. We can also ensure that we create equitable avenues for wealth building. As we reduce the pollution caused by extraction, we can create safe, living wage jobs in recycling and reuse. As we reduce deforestation, we can increase access for recreation in our natural areas. As we redefine what it means to live a good and rich life, we can ensure that people who have traditionally had the least access to the American Dream will get to enjoy health and happiness. This inclusive process will result in more complex systems that better meet the needs of a diverse population. "It is not our differences that divide us. It is our inability to recognize, accept, and celebrate those differences."

Audre Lorde

WHAT IS EQUITY?

he Portland Plan uses the following definition for equity:

"Equity is the right of every person to have access to opportunities necessary for satisfying essential needs and advancing their well-being."

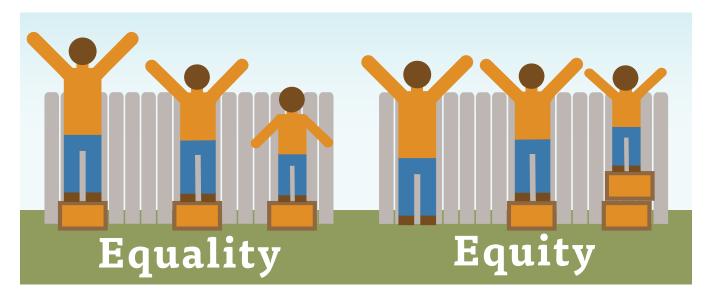
What does equity look like?

- All residents have access to opportunities, such as good jobs, education, healthy food, housing and self-expression.
- The benefits and burdens of growth and change are equitably distributed across our communities.
- All residents and communities are involved as full and equal partners in public decision-making, problem-solving and implementation; and these processes consider the history of impacted communities.

Equity is not the same as equality

There are important distinctions between equality and equity. Equality aims to distribute exactly the same resources to everyone equally. The idea is that if we all get the same things, we will all enjoy life and health equally. Equality aims to promote fairness and justice, but equality can only work if everyone starts from the same place and has the same needs and wants. Equity, in contrast, involves ensuring that people have access to opportunities to enjoy full, healthy lives. Aspects of our identities, such as race, class, and gender, can determine the difference in what is made available to us as individuals to enjoy full, healthy lives. Equity requires looking at the historic, social, and institutional barriers that impact people's access to opportunity and correcting for any negative outcomes.

A focus on equity recognizes that people do not start at the same place and consequently people have different needs. A focus on equality strives for a perfectly even distribution of resources. Whereas an equity approach takes into account the actual desires and needs of each population and their ability to satisfy those desires and needs.

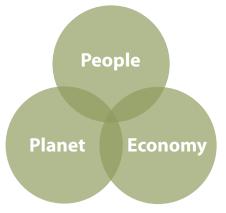


This image illustrates some of the differences between equity and equality. All three people want to see over the fence so they can watch a game. On the **equality** side of the graphic, each person is given an equal number of boxes. If the three people were the same height, this might be fair, but they are not, so the boxes only help the person in the middle. The tall person already had access to see the game and the shorter person still can't see it. On the **equity** side of the graphic, the boxes are distributed to ensure that all three can enjoy the game.

EQUITY AND OREGON'S MATERIALS MANAGEMENT VISION

The equality vs. equity graphic (shown above) can guide our thinking about how we meet Oregon's materials management vision. For "all Oregonians to enjoy life and attain well-being," it is important to understand the diversity of the people who live here. We must understand their different levels of access to things like education, job opportunities, financial institutions and professional services. These levels of access have everything to do with where they were born, their economic background, and their race. Inequity is built into our institutions. So addressing the material environment and economy without defining, addressing, and monitoring existing disparities will perpetuate those inequities. It is all too easy for inequities to be built into our new environmental and economic policies.

TRIPLE BOTTOM LINE OF SUSTAINABILITY



Many models of sustainability are based on a triple bottom line that says we must plan for and measure economic, environmental and social outcomes. Unfortunately, though, economic and environmental factors typically receive much more attention and more precise accounting. All too often measures of social impact are simply tagged on at the end and rarely measure how different populations may or may not be experiencing those impacts differently.

Julian Agyeman, an expert on environmental justice and sustainability and a professor at Tufts University notes that, "you cannot retrofit for equity." To come up with solutions to sustainability problems, he argues it is paramount that existing disparities are named at the outset and that the people who might carry the biggest burdens help shape and build the new system.

To be successful in creating a more sustainable Oregon, we must understand people's wants and needs. We must recognize our differences and not strive for a single definition of success. If we redirect our focus from all the materials we produce and consume to the satisfaction of all peoples' core needs, we may be able to learn to consume only what satisfies our needs.

Our current global economic model is based on the assumption that higher consumption, driven by economic growth, leads to greater wellbeing. Any rise in consumption, however, entails an increase in the consumption of natural resources. As population grows and consumption rises, scarcity of natural resources, such as fossil fuels, may pose a limit to economic growth. With climate change threatening to dampen economic growth, and the UN predicting that the global population will swell to 9 billion by 2050, policymakers are questioning whether consumption and wellbeing can rise indefinitely.

Research into the science of happiness shows that a future of less consumption need not be bleak. Evidence shows that poorer people certainly benefit from higher incomes and associated boosts in consumption, but that at higher income levels, the connection between greater consumption and greater well-being disappears. In other words, if your basic material needs are already met, getting to work extra hours or buying a newer car will not likely make you substantially and lastingly happier.

It is worth noting that while well-off populations both domestically and abroad may be called on to reduce and consume less, that the majority of the world's population needs to consume more to meet their basic food, health, and housing needs.

CASE STUDY: THE ACCESS ECONOMY

Let's look at an example of a new business model that is designed to address consumption, but is failing to recognize and address existing disparities in the process. In this example it is clear that inequities are getting built into the new economic and social structures.

The **access economy** is a business structure that emerged in the mid-2000's. It was originally termed collaborative consumption and then branded as the sharing economy. Access economy is increasingly being utilized to describe this for-profit business model which utilizes information technology to provide people and businesses with resources. Rather than providing products to consumers, the business model is to provide a platform where consumers can access objects and services that they can use when they need them and then return them.

This approach to distribution of goods and services has been touted as an important way to reduce the consumption of products by helping people use online technology to share objects that are sitting idle. These are some examples of common idle products:

TERM

Sharing or access economy: *A* business model in which individuals are able to borrow or rent assets owned by someone else usually through a technology platform.



Tool library volunteers



An average car is used 8 percent of its lifetime and sits in a garage waiting to be useful.

The average power drill is used 6 to 13 minutes of its lifetime.



The average U.S. home is 2,400 sq. ft. in contrast to 818 sq. ft. in the United Kingdom and many have a spare room that sits untouched most of the year ready for the occasional guest.

Sharing economy businesses provide a way for people who have idle stuff and people who need to use that stuff to find each other. Research has shown that people who use these services see them as beneficial for the environment. They help people feel more connected to the community, and it is a platform where regular folks can turn their fallow assets into cash machines. The belief is that this *peer-to-peer* exchange offers greater access to income in our economy by allowing people to make money off of the objects they already own. It is then not just the manufacturers that make money from the products, but also people who own them. The access economy has boomed. Two of the most successful examples are Airbnb and Uber. When it comes to demonstrating that such a platform is a good business model, these two companies have made it big. Airbnb was valued at \$25.5 billion in June 2015. Uber was valued at \$50 billion in May 2015.

Airbnb aims to be a trusted community marketplace for people to list, discover, and book unique accommodations around the world. Uber connects people who need a ride with people looking to earn money driving their car.

Research shows that these new marketplaces provide access and opportunity to those who are already wellconnected and comparatively well-off. But the sharing economy is not extending opportunities to historically underserved communities. Rather, this new economy is every bit as inequitable as the rest of our economy, if not more so.

/ DEEP DIVE

For more information you can consult Living Cities' blog post, How Can Shared Mobility Help Connect Low-Income People to Opportunity? (available online). Low-income communities and communities of color carry the heaviest transportation burdens and could benefit tremendously from flexible, lowcost transportation options. But as a study commissioned by Living Cities shows, these populations rarely use these types of platforms due to a lack of drivers or extra rooms in their neighborhoods, lack of internet access, and other barriers.

Fair pricing is another challenge. There are no neutral platforms in a racially inequitable society, and on the seller side, there is a risk that people of color using profile-driven platforms are not on a level playing field. A Harvard Business School study found that New York City Airbnb hosts who are not black charge about 12 percent more than black hosts for comparable properties. While the Fair Housing Act provides some protections against race-based discrimination, Airbnb claims that their services are not about housing and therefore discrimination laws against certain potential renters should not apply.

Short-term rentals are most popular in cities like San Francisco, New York and Portland, which also struggle with vacancy for affordable rental housing. It is unclear how many people or agencies are short-term renting multiple units in various buildings throughout these cities, potentially displacing residents with tourists. In Portland, rental vacancy was down to 3 percent in 2014. Meanwhile there was a dramatic increase of residences being rented on a short term basis. In response, the City of Portland created a new short-term rental program that allows residents to rent one or two bedrooms in their home where they live to overnight guests, but they must get a permit.

In September 2016, the program's first monitoring report states that the number of units continued to grow from an estimated 1600 in 2014 to 5000 in 2016. The report found that compliance is low. Only 22 percent of the short-term rentals actually have a permit.

These examples provide an important caution. For emerging economies to be equitable, we must look squarely at the existing systems with an equity lens and bring those who would be most vulnerable to negative impacts to the table to help define and develop the new strategies.

REUSE AND RECYCLING: GOOD FOR JOBS?

n previous chapters we learned that recycling generates jobs. The EPA states that the U.S. recycling industry employs millions of people. Resource Recycling magazine states that for every job necessary to make a beer bottle from scratch, it takes three jobs to make it from recycled glass.

But are they good jobs?

A 2015 study, *Sustainable and Safe Recycling* by GAIA, Partnership for Working Families, MassCOSH and National Council for Occupational Safety and Health, looked at OSHA records across the country and found that recycling workers face serious hazards on the job.

In too many cities across the country, including the metro region, sorters work in loud and dusty facilities, where they are often exposed to extreme temperatures. Working long hours, they lean over conveyor belts sorting materials, pulling out things that don't belong, ensuring that the best guality materials are bundled together for the highest market value. They work with heavy equipment in dangerous situations, climbing onto and into massive conveyor belts and balers to clean them. They maneuver past huge front-end loaders and forklifts, and walk by heavy bales of material that, when unsafely managed, can fall on workers who are in the wrong place at the wrong time. Moreover, they deal with an array of inherently unsafe materials that should not be on the recycling line, such as used needles, chemicals, dead animals and broken glass.

As a result of these unsafe conditions, recycling workers face above-average injury rates and are sometimes even killed on the job. Many recycling sorters are employed by temporary employment agencies, further increasing the likelihood that they won't have the training or experience needed to do their job safely.

Resource Recycling magazine's Senior Editor, Jerry Powell, states that the system of Material Recovery Facilities (MRF's), where recycling is sorted in the metro area, are more out of date than most in the country. He explains that because the region has so many MRF's competing against one another, they are less able to invest in much needed updates that would result in better recovery and worker safety. The role of MRF's in our recovery system will be discussed in detail in the Discards Chapter. The main point he makes here is that DEQ, Metro and the City of Portland will need to decide to provide leadership in negotiating change in this system if we are to see improvements.

Master Recyclers also have the power to help prevent harm to recycling workers through public education



Workers at a local Material Recovery Facility (MRF)

and outreach. The public needs to be informed that some materials threaten the health and safety of people working in recycling facilities. These materials include hypodermic needles (which can carry life-threatening illnesses) and plastic bags (which can clog machinery and require workers to climb more frequently into heavy equipment in order to remove the plastic).



CONCLUSION

As we have recognized the ecological importance of biodiversity, we are increasingly also recognizing the importance of human diversity. Researchers have estimated that there are between three to 30 million species on Earth, with a few studies predicting that there may be over 100 million species on Earth! This great variety of life and its processes is called biodiversity. Ecosystems have evolved over thousands, hundreds of thousands, or even millions of years, and are therefore in delicate balance, with each species playing a vital role. This interrelatedness of species means that safeguarding biodiversity is essential to safeguarding our natural systems. Coming to understand this has been an important paradigm shift for conservationists, and it has led to the understanding that each species, no matter how small, plays an important role in the ecosystem.

Much as biodiversity is important to environmental sustainability, human diversity is essential to economic and social equity. In this chapter we learned that equitable solutions arise only out of a careful consideration of our diversity and our differences. Because people do not start out from the same place and because they have different wants and needs, equity cannot be achieved by distributing resources to everyone exactly equally. Rather, an equitable distribution of resources must take into account current inequities and barriers to access. And equitable solutions to materials management must consider all people, including the workers who sort recyclable materials. Utilizing an equity lens while working on making shifts in our consumption and production of materials will improve our chances of creating rich complex systems that build benefits and serve a variety of cultures and communities.