



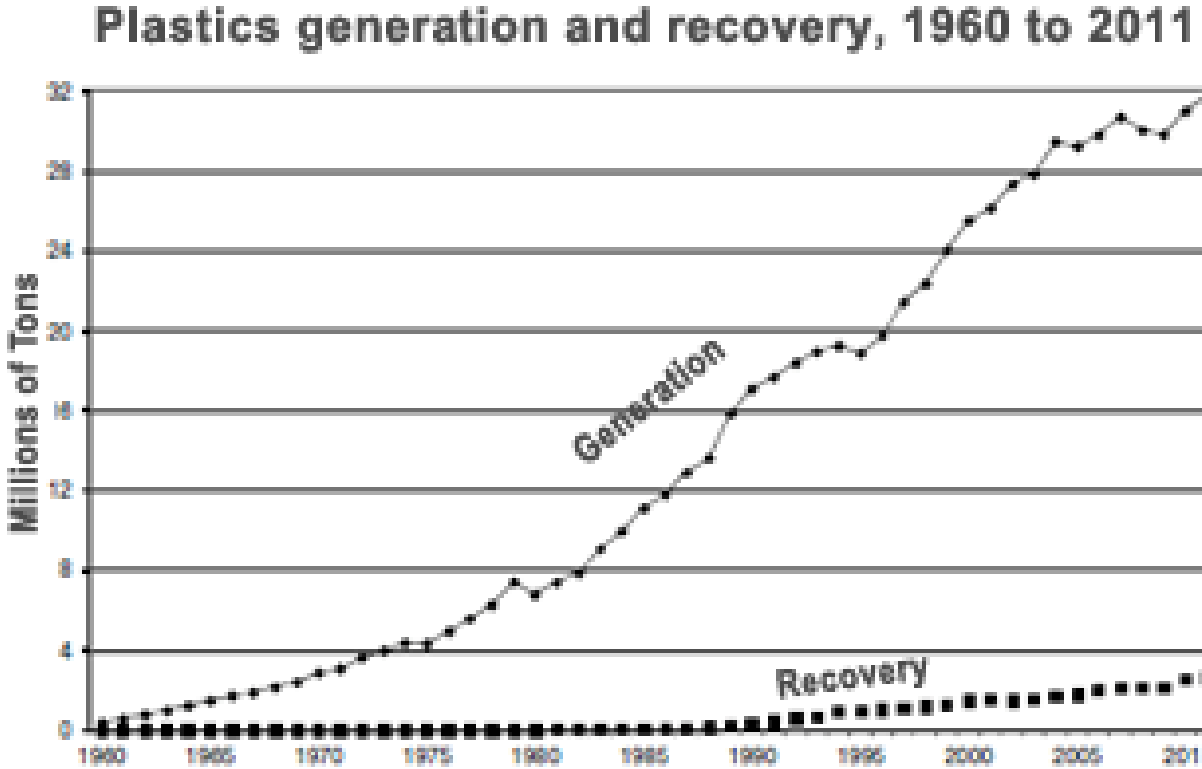
**Resourceful
ME**

**Exploring the Value of
Maine's Reuse Economies**

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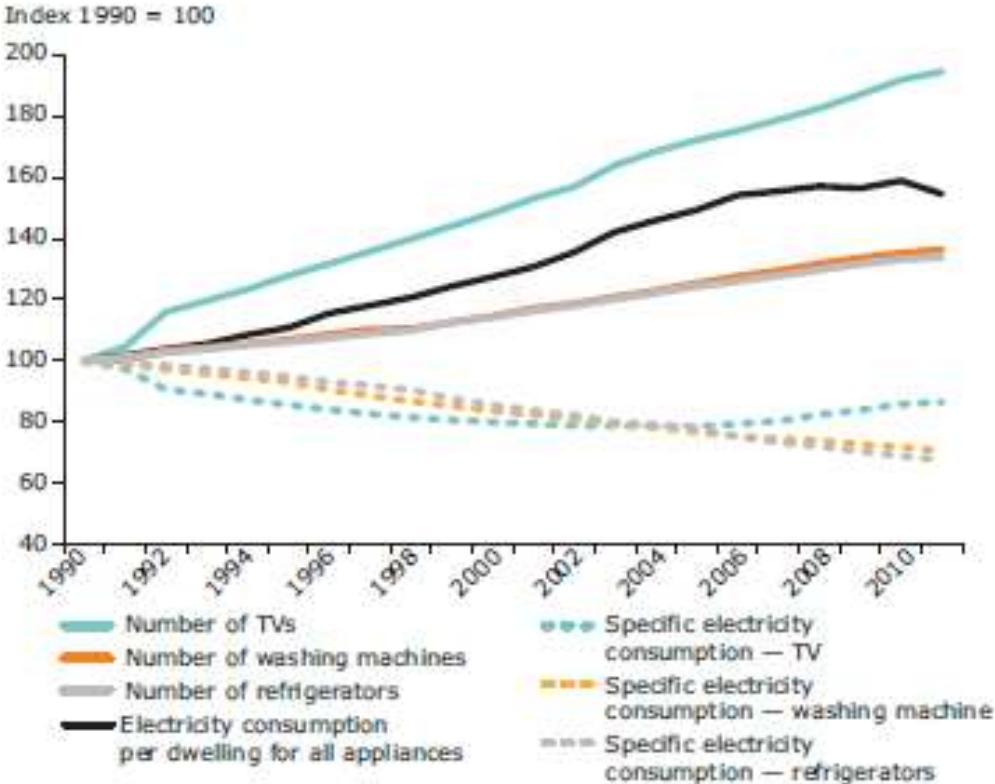
Anthropology,
Climate Change Institute, &
Senator George J. Mitchell Center for
Sustainability Solutions

The context for degrowth... and reuse!



EPA 2012

Figure 5.11 Trend in energy efficiency and number of electrical appliances in households, EU-28, 1990-2011



EEA 2014



Decoupling and displaced emissions: on Swedish consumers, Chinese producers and policy to address the climate impact of consumption

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ABSTRACT

New developments in consumption-based emissions accounting suggest that the reductions claimed by wealthy, environmentally progressive nations have often come at the expense of increased emissions elsewhere – and thus net growth in global GHG concentrations. This paper traces Sweden's attempt to translate growing recognition of displaced emissions into national environmental policy. Drawing on multi-sited ethnographic research and policy analysis in Sweden and China, we argue that while the logical implications of consumption-based analysis point to the need to address production and consumption as an integrated system, complex governance challenges and the political precariousness of these ideas have thus far limited policy to the creation of consumer awareness campaigns and an international extension of long-standing ecological efficiency efforts. We argue that consumption-based emissions indicators justify more ambitious demand-side policy response.

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1. Introduction: the climate impact of consumption

Concerned about climate change, many nations have responded with mitigation efforts focused on improving domestic energy efficiencies – often with notable success (Wendner and Muir, 2008; IEA, 2013). However, a large and growing body of research has documented the cannibalization of these domestic improvements by sustained growth in consumption and the emissions embedded in international trade (Montgomery et al., 2002; SEPA, 2012). More disturbing, many lend empirical support to the assertion that national efforts to decouple economic growth from ecological harm can result in displaced environmental impact and net growth in global emissions (Peters and Hertwich, 2008; Peters et al., 2011).

Drawing on these findings, this paper addresses the significant climate impact of what the European Environmental Agency (EEA, 2012b) has suggested is the “mother of all environmental issues”: consumption. As living standards and ideologies of need continue to “ratchet up” (Shove, 2004) in both developed and developing economies, the emissions embodied in internationally traded consumer goods are increasingly significant drivers of global GHG

concentrations. Peters and colleagues (2011b) argue that 28% of global emissions are already embodied in international trade, a portion that is only projected to increase with intensified globalization and market liberalization (Lano, 2013).

While there have been significant advancements in methodologies to analyze the climate impact of growing consumption levels and carbon-rich international supply chains (Duro and Caldeira, 2008b; Davis et al., 2011; Peters et al., 2012, 2011; Windmann, 2009), efforts to incorporate these insights into international negotiations have been marginalized (see Alderman et al., 2011; Casmanly, 2012; Isenhour, 2012; Martino et al., 2009; Peñalver, 2012). National policies to address the climate impact of consumption are also extremely rare (Broadbent, 2010) due to the complex governance challenges presented by global supply chains. Only a few nations have measured the global impact of their consumption, and even fewer have attempted to stoker them to inform climate policy (Barrett et al., 2013).

This paper traces one such effort in Sweden – the first nation to officially recognize the displaced climate impact of their consumption. We explore how this wealthy and environmentally progressive nation has attempted to translate these findings into politically viable environmental policy. The Swedish case has significant international relevance given that Sweden is internationally celebrated as a successful example of ecological-economic decoupling, a strategy that has been highlighted as a significant

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Unearthing human progress? Ecomodernism and contrasting definitions of technological progress in the Anthropocene

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With increased awareness of the current and projected consequences of climate change, many have argued that rapid technological progress presents the sole means by which to avoid dangerous climate change and ensure human welfare. Proponents of this “ecomodernist” perspective argue that, with technological innovation, climate mitigation doesn’t have to come at the expense of the economy. Instead, economic growth can be decoupled from ecological harm through efficiency gains and the technological intensification of human activities. Marshaling very different theoretical and empirical perspectives, critics argue that contemporary reliance on technology has proven insufficient and has often had deleterious systemic consequences, including delayed mitigation and the displacement of environmental costs in an unequal global economy. This article is inspired by an ethnographic moment that drew these two contemporary perspectives into sharp relief and is grounded in a survey of the highly contradictory evidence in support of and contrary to the ecomodernist perspective. It traces these perspectives to fundamentally different views on the nature of technology and progress, both with deep theoretical roots familiar to economic and environmental anthropologists. In the end, the article argues that the dominant emphasis on technological progress, though hopeful, is linked to affluent urban perspectives that delegitimize more aggressive and just proposals for climate mitigation and human progress.

Keywords: Climate Change; Technology; Ecomodernism; Decoupling; Degrowth; Policy

On a summer night in 2014, my research assistant Chen¹ and I met for dinner on a paper-lantern-covered patio in Beijing’s Sanlitun district. It was our first night in the field, so we planned to take it easy and review the goals of our project. I began with the background story, one that had started six years earlier, when the Swedish Environmental Protection Agency (SEPA) released the country’s first consumption-based emissions report. Contrary to the state’s official production-based emissions inventory, submitted in accordance with the Kyoto Protocol, the consumption-based version suggested that if the emissions associated with Swedish consumption and international trade are accounted for, regardless of where they were released, emissions were at least 25 percent higher than previously assumed (SEPA 2008).²

The SEPA report raised questions about one of the most central claims of Swedish and global development discourse: that economic growth could be “decoupled” from environmental impact through investments in alternative technologies and increased efficiency. Sweden had made significant investments in efficiency improvements, resulting in a 72 percent reduction in the carbon intensity³ of its economy since 1970 (Skånberg 2012). But, as the report made clear, household consumption expenditures in the country had more than doubled over the previous two decades (GFCFS 2008), and imports had risen by 40 percent between 2000 and 2008 alone (SEPA 2012:15). The report thus suggested that Sweden’s domestic efficiency gains and decoupling efforts were being outpaced by its

The problem with circular economies & decoupling...

- Efficiency & recovery increasing!
- But...so is consumption...
 - Arrows are getting thicker
 - Materials use increased by a factor of 8 over last century (EEA 2014)
 - Embodied energy
 - Rebounds, backfire
 - Unintended consequences



REUSE...

“Redistribution of previously owned material goods, in their original form, from one agent to another through a transfer of ownership (sale, swap, barter, gift) or temporary use agreement (borrow, rental, lease, share, loan). We also include in the scope of reuse, activities designated ‘prepare for reuse’ such as restoration and repair services”



WHY study the reuse economy...

- **Ecological Value:** More efficient to extend lifetime of existing products than recover wasted materials...reduces demand, takes waste out of capitalist circulation
- **Economic Value:** Employment, local development, household savings, economic leveling
- **Social Value:** Social capital, trust, relations of mutual support, improved resilience, programs built on existing institutions more likely to succeed
- **Policy enthusiasm:** UNEP 10YFSCP: “promotion of repair & maintenance as alternative to new products”; Austin, Seattle, Chicago, Philadelphia, New York and Detroit - community swaps, repair events, materials exchanges and industrial symbiosis...
- **However...** efforts to develop methods and indicators to measure the value of these practices, whether defined in economic, social, cultural or ecological terms, are still in their infancy (Oregon DEQ 2012, EEA 2014).

DRAFT Strategic Plan for Reuse, Repair, and Extending the Lifespan of Products in Oregon

October 2016



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State of Oregon
Department of
Environmental
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DEQ is a leader in
restoring, maintaining and
enhancing the quality of
Oregon's air, land and
water.

...concepts like collaborative consumption (and reuse) constitute a “broad church” that “without greater precision and clarity around how we define it, we run the risk of continued confusion about its value and potential” (Stokes,14).

BONEYARDNW

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TOUR DE THRIFT

*Guides & Reviews
for Thrift Shopping
Adventures*



**NOR'EAST
ARCHITECTURAL
ANTIQUES LLC**
Antique Building Materials

“There is an age-old saying here in Maine, you know...

‘use it up, wear it out, make it do or do without’” -interview 9/16

....”you know there is nothing new in Maine,
really, just a bunch of stuff moving from
one yard sale to another” – interview 7/16

“people come from all over the world to Maine
to hunt for treasure - seaglass on the beach, a moose
in the woods or a rare anitique in a dusty old junk shop”
- interview 9/16

“...Maine has the lowest per capita waste generation rates in the
country – people just don’t like to throw stuff out” -DEP interview 5/16

Resourceful ME

Measure and model the economic, environmental and social value of Maine's vibrant reuse economy...

Understand various forms of reuse relative to their economic, social and environmental benefits

Explore the material, ideological and cultural roots of Maine's strong reuse institutions ...



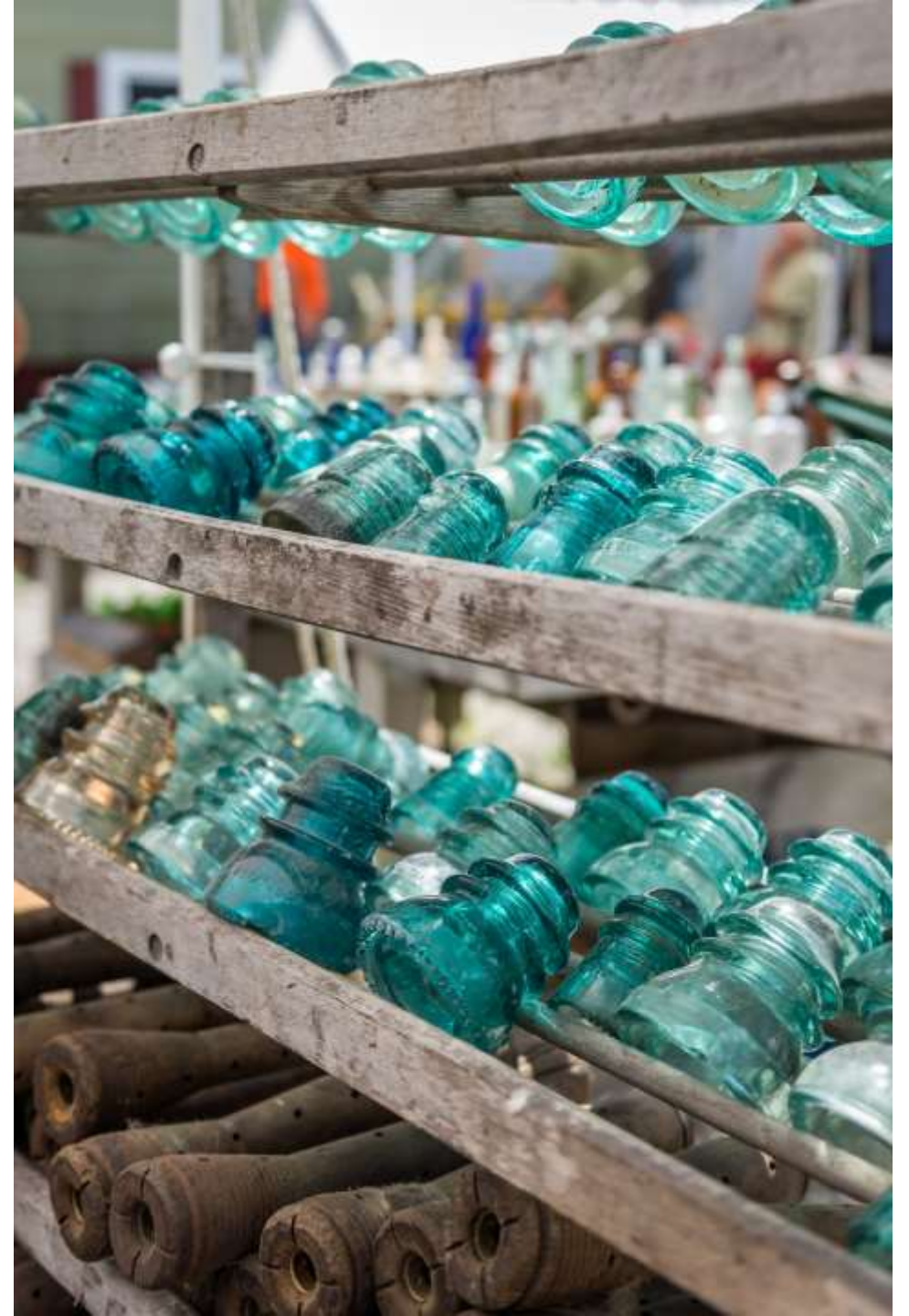
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1. Construct database of formal reuse, repair and resale sector in the state of Maine. DONE
2. Survey formal sector businesses/organizations to gather data on sales, employment, motivation, business history. Triangulate with public regional development data. DONE
3. State level representative household survey to measure participation in different forms of reuse.
4. LCA in three sectors to estimate CO₂, H₂O and land use offset
5. Ethnographic field work/field school in reuse markets and case study households (identified via survey)



Observations to date

- Accounting systems not set up to represent reuse sector...highly undervalued
- Businesses low entry, economic resilience strategy
- There is a MUCH stronger social component to the reuse sector than we imagined
- There is a lot of pleasure in reuse...



Social purpose...





waste people
quality items
history
antiques help used
hand
second
environment dealing sustainable
Enjoy value independence
make children
Love better local
books reuse
interest old shop things
consignment
furniture community
business
selfemployed



LEE TURBO ACTION

BEST FOR ALL BRAKES
Raybestos
WOVEN MOLDED
BRAKE LINING

WARNING

No Smoking

NO SMOKING BEYOND THIS POINT

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HOV





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