Precycling premiums as a policy tool to mainstream circular economy

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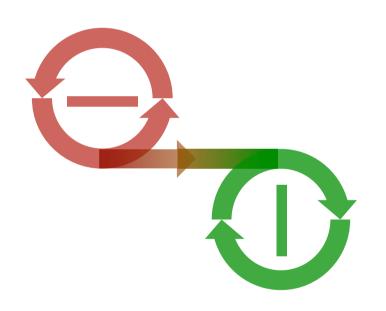


Context of discussion

- EU circular economy communication: circular economy "implies full systemic change"
- Employers Federation BusinessEurope: circular economy package should be reformulated "as an economic piece of legislation"
- European Commission: circular economy package withdrawal allows "a broader, more ambitious approach that can be more effective"
- De Groene Zaak <u>report</u>, Governments Going Circular best practice case study: "a new way to implement ambitious circular economy by using markets to desgn out waste"



precycling + producer responsibility = circular economy



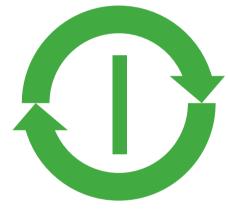
5 part discussion

- I. Criteria for success
- II. New language
- III. How it works
- IV. Cases
- V. Issues

Questions/discussion welcome with each part

Part I: success criteria

current resources



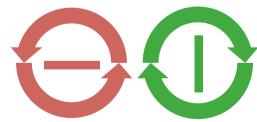
future resources

- Try new language/methods
- Goal is systemic change not improvement
- New incentives = new system = new outcomes
- Faster progress than with targets
- More eco-innovation than with prescriptive regs
- More political support than with waste-focus
- Use economics as the lever to go from old to new
- Embed producer responsibility in markets
- Future markets solve not cause big problems
- Future GDP growth by keeping not losing resources

Why is system change still novel after 40+ years of global problem-solving?



- We're in a paradigm
- Paradigms are self-reinforcing
- Bad news: solutions can seem realistic if they fit the current paradigm, rather than if they create the new one
- Good news: if we go ahead and change the paradigm anyway, then the new system will also be self-reinforcing. Routinely making waste will seem silly. Patchwork solutions will seem silly.



End part I: Qs?

Part 2: New language for new EPR methods

- 1. Ecological waste. Used materials accumulating in ecosystems (air/land/water).
- **2. Precycling**. Action to stop future waste. The basis for EPR.
- **3. Waste risk**. The likelihood of a product becoming ecological waste.
- **4. Precycling premiums**. Insuring waste risk.
- **5. Precycling fund**. Premiums collected and spent to cut waste risk.
- **6. Circular economics**. The economic design of circular economy.









managing waste after the point of disposal

pre-waste choices

waste management

outcomes

point of disposal waste waste waste waste laste chaos weeksterns tuture of disposal reuse waste burn waste limate chaos weeksterns tuture



managing waste before the point of disposal

pre-waste choices

outcomes

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precycling = action to stop future waste

- Action taken now to ensure that resources remain as resources, for the economy or for nature, rather than adding to wastes in ecosystems.
- Circular economy vision translated into practice
- Attention to the non-disposal options of the waste hierarchy
- Fresh language to support dialogue, collaboration and innovation
- Non-prescriptive approach to producer responsibility





Every product can be precycled. Everyone can precycle

What can we do now to give this material a future as a new resource for people or for nature?

- 1. Change the product?
- 2. Change the business model?
- 3. Change the society/economy/infrastucture around the product?
- 4. Ideas, designs, logistics, infrastructure, financing, collaborations?





Waste-risk

- Waste-risk = Likelihood of a product becoming ecological waste
- Waste-risk is a resource efficiency indicator
- Not just about solid waste
- Waste-risk can be applied to raw materials, chemicals, components, fuels, products, businesses, cities and whole economies.
- Key indicator of circular economy: eg 25% waste-risk = 75% circularity
- Ideal to design a systemic economic tool for EPR





Measuring waste-risk

Waste-risk is quantifiable

- What proportion is recyclable or biodegradable?
- What proportion is handled by producer's addition to processing capacity of nature or industry?
- What proportion of new products becomes wastes?

Waste-risk indicates impacts

- Measurement and prediction of all impacts for all products is impossible (due to complexity)
- Sustainable development = economic, societal and ecological actions to cut waste risk.

BLINDSP T THINK TANK End part II: Qs?

Insurance -> Recycling Insurance



Third party car insurance

- Obligatory
- Cheaper with lower risk

- Recycling insurance
- Part of the EU WEEE Directive since 2002
- Premiums fund a financial guarantee of future recycling
- Works for recyclable items
- Can be extended to all products and all ways to stop ecological waste



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precycling premiums -> precycling fund



government regulates

producers pay premium

insurers spend premiums

society precycles

circular activity/innovation





End part II: Qs?

Part III: How precycling premiums work

- Linear economics neglects resource-related externalities
- Can price externalities with a market-based tool (ie not fiscal/tax)
- Waste-risk = risk of a product becoming waste in ecosystems
- Producers are financially responsible for ecological waste from their products
- Oblige producers to 'insure' against their product's waste-risk
- Low waste-risk means zero/low precycling premium
- High waste-risk means a higher premium
- Premiums are spent to cut waste-risk throughout society





Advantages

- 1. Generic: works for all products, all resources, all sectors and many issues (eg climate, critical raw materials, ecosystems, jobs)
- 2. Better for government: Clear allocation of responsibility. More problems solved with less regulation. No tax, no fiscal negotiations.
- 3. Better for business: Level playing field. Innovation incentives. Freedom of choice in how to respond. Costs shared by all market participants.
- 4. Works with other economic and regulatory tools. Can be adopted internationally (even for carbon pricing) with minimal fuss.
- 5. Decouples impacts from GDP growth. Ends historical conflict between profit/growth/markets and survival.



End part III: Qs?



Part IV: precycling premiums case studies

Kettle A

- Low effort by producer
- High waste-risk
- Pays premium
- Insurer spends premium on precycling elsewhere
- Producer less competitive



Kettle B

- High effort by producer
- Low waste-risk
- Pays no premium
- Public can see the product circularity plan
- Producer more competitive

Case study: mining and minerals

- Circular economy can be a vision for mining that embraces the whole society, not just 'greener operations'
 - Offer a high-value 'perpetual product', not a throw-away product
 - Show society how to actually do #circulareconomy
 - Ensure continuing 'social licence to operate'
 - Minimise land conflicts, operating costs and delays
- Maximise profits both from existing mines and new circular resource opportunities







Case study: marine pollution

- Plastics, oil, acidification and fertilisers in oceans are all waste issues
- The source of all these problems is products with high waste risk
- Many plastic products, fossil fuels, nuclear fuels, fertilisers, etc have high waste risk
- None can be solved by conventional targets, ocean campaigns, national initiatives, etc
- All can be tackled at source with economy-wide precycling premiums
- All require global ambition



End part IV: Qs?

Part V: issue #1, How to ensure fairness?

- Linear economy with unpriced externalities maximises unfairness
- Waste-risk and precycling premiums calculated with standard formulae
- Oversight by government regulators
- Public transparency on product circularity plans, waste-risk and premium spending
- False info by producers invites penalty and higher future waste-risk
- Frontrunners gain advantage by spending on their own products. Slow competitors pay premiums that cut waste-risk elsewhere.
- Premiums apply within circular economic area, not externally
- Go fast globally by international agreement; could replace slow single-issue talks





Issue #2, How to advance and implement?

- Invite input from experts
- Feasibility study
- Sector case studies
- Raise in public & policy discussion
- Pilot project with voluntary participants, small or shadow premiums
- Briefings and modelling to show policy-makers
- Start in EU, then EU know-how leads globally









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