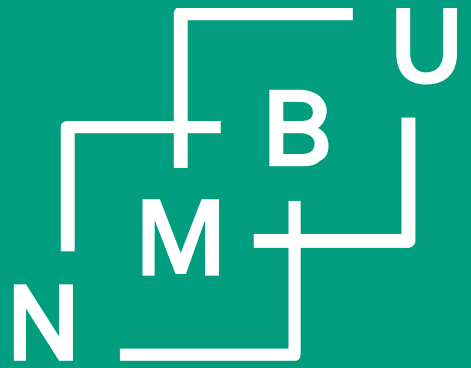


Norges miljø- og biovitenskapelige universitet

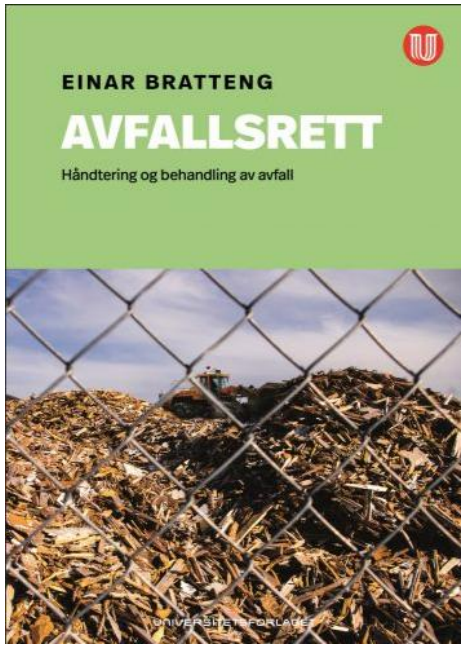
Dilemmaer i en sirkulær økonomi

Fra et rettslig perspektiv

V/Einar Bratteng

Kort om meg

- Assistant Professor in Law at NMBU
- Phd in legal science from University of Oslo – focusing on environmental policy development in EU
- Lecturer at BI Norwegian Business School at the Masterprogram in Law
- «How Curiosity killed Humankind - A Critical Reflection on the Trajectory of Artificial Intelligence" – to be published in Nordic Machine Intelligence (sept. 2025)
- Why EU is Choking on Its Own Values: An Examination of Article 2 of the Treaty on European Union" – to be published in Global Policy (dec. 2025?)
- + a lot of other stuff



Struktur

Del 1 – Metadilemmaer

Del 2 – Hvilke miljøhensyn fremmer sirkulær økonomi?

Del 3 – Mikrodilemmaer

Del 1 - Metadilemma

v/Einar Bratteng

Hva er dilemmaet?

Det er ganske lett å øke ressursutnyttelsen av f.eks. avfall,

- utfordringen er å gjøre dette på et måte som ikke medfører skade på helse og miljø (og aller helst at miljøet får det bedre)

Vekting av ressurshensyn mot miljø

- Grunnleggende sett er utfordringen vår hvordan ressurshensyn skal vektes mot miljøhensyn.

- Kompleksiteten øker avhengig av hva vi (EU) oppfatter som «miljø»

- Hvordan disse hensynene skal vektes mot hverandre er en utfordring som løper som en rød tråd gjennom regelverkene og er egentlig uløst.

Treaty of the Functioning of the European Union

Article 191

(ex Article 174 TEC)

1. Union policy on the environment shall contribute to pursuit of the following objectives:

— preserving, protecting and improving the quality of the environment,

— protecting human health,

— prudent and rational utilisation of natural resources,

— promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change.

2. Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.

In this context, harmonisation measures answering environmental protection requirements shall include, where appropriate, a safeguard clause allowing Member States to take provisional measures, for non-economic environmental reasons, subject to a procedure of inspection by the Union.

3. In preparing its policy on the environment, the Union shall take account of:

— available scientific and technical data,

— environmental conditions in the various regions of the Union,

— the potential benefits and costs of action or lack of action,

— the economic and social development of the Union as a whole and the balanced development of its regions.

På et overordnet nivå er traktaten veldig innrettet mot å forbygge forurensning

De aller fleste miljøregelverkene i EU (og Norge) er grunnleggende sett basert på føre-var-prinsippet

Rammedirektivet for avfall (2008/98/EF)

DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 19 November 2008

on waste and repealing certain Directives

(Text with EEA relevance)

CHAPTER I

SUBJECT MATTER, SCOPE AND DEFINITIONS

▼M4

Article 1

Subject matter and scope

This Directive lays down measures to protect the environment and human health by preventing or reducing the generation of waste, the adverse impacts of the generation and management of waste and by reducing overall impacts of resource use and improving the efficiency of such use, which are crucial for the transition to a circular economy and for guaranteeing the Union's long-term competitiveness.

- Hva betyr dette egentlig, hvordan gjøres vektingen?

Vi ender ofte ned i de konkrete bestemmelsen

Article 6

End-of-waste status

▼M4

1. Member States shall take appropriate measures to ensure that waste which has undergone a recycling or other recovery operation is considered to have ceased to be waste if it complies with the following conditions:

(a) the substance or object is to be used for specific purposes;

▼B

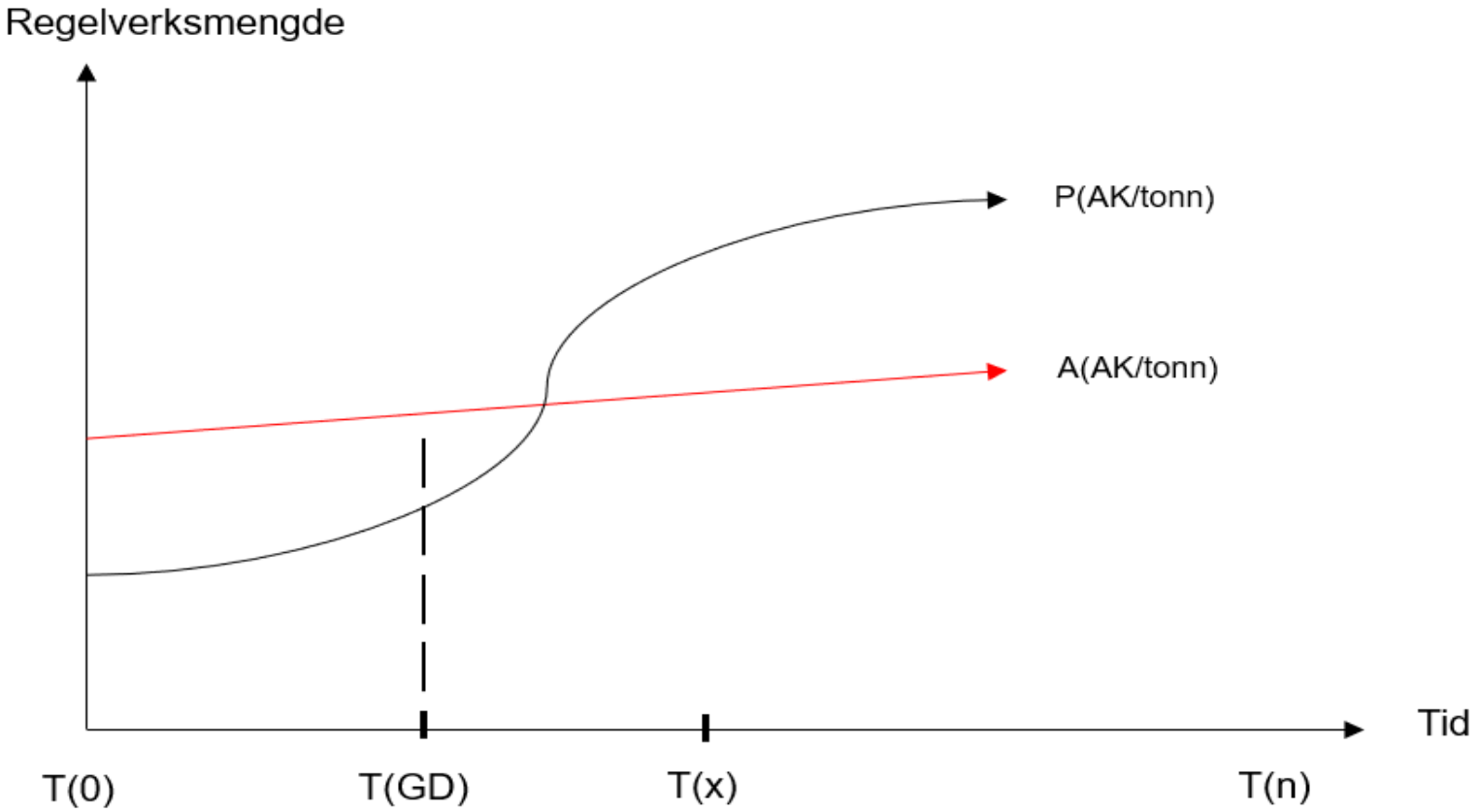
(b) a market or demand exists for such a substance or object;

(c) the substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products; and

(d) the use of the substance or object will not lead to overall adverse environmental or human health impacts.

Koblingen til produktregelverket er rimelig tett i disse kriteriene

Koblingen mellom produkt- og avfallsregelverket



Økende kvalitetskrav til produkter innebærer med andre ord at det blir mindre attraktivt å transformere avfall til produkter/råvarer – i alle fall i ganske lang periode før nye produktkrav får effekt – men effekten av europeiske produktkrav er usikker.

Del 2 – Hvilke miljøhensyn fremmer sirkulærøkonomi?

v/Einar Bratteng

Hva er sirkulær økonomi?

EUs definisjon – Taksonomiforordningen (forordning (EU) 2020/852) art. 2 nr. 9

> 'circular economy' means an economic system whereby the value of products, materials and other resources in the economy is maintained for as long as possible, enhancing their efficient use in production and consumption, thereby *reducing the environmental impact of their use*, minimising waste and the release of hazardous substances at all stages of their life cycle, including through the application of the waste hierarchy;

- Det er noen utfordringer med definisjonen sett fra et europeisk perspektiv?

Hva er sirkulær aktivitet?

Article 13

Substantial contribution to the transition to a circular economy

1. An economic activity shall qualify as contributing substantially to the transition to a circular economy, including waste prevention, re-use and recycling, where that activity:

(a) uses natural resources, including sustainably sourced bio-based and other raw materials, in production more efficiently, including by:

  (i) reducing the use of primary raw materials or increasing the use of by-products and secondary raw materials; or

  (ii) resource and energy efficiency measures;

(b) increases the durability, reparability, upgradability or reusability of products, in particular in designing and manufacturing activities;

(c) increases the recyclability of products, including the recyclability of individual materials contained in those products, inter alia, by substitution or reduced use of products and materials that are not recyclable, in particular in designing and manufacturing activities;

(d) substantially reduces the content of hazardous substances and substitutes substances of very high concern in materials and products throughout their life cycle, in line with the objectives set out in Union law, including by replacing such substances with safer alternatives and ensuring traceability;

(e) prolongs the use of products, including through reuse, design for longevity, repurposing, disassembly, remanufacturing, upgrades and repair, and sharing products;

(f) increases the use of secondary raw materials and their quality, including by high-quality recycling of waste;

(g) prevents or reduces waste generation, including the generation of waste from the extraction of minerals and waste from the construction and demolition of buildings;

(h) increases preparing for the re-use and recycling of waste;

(i) increases the development of the waste management infrastructure needed for prevention, for preparing for re-use and for recycling, while ensuring that the recovered materials are recycled as high-quality secondary raw material input in production, thereby avoiding downcycling;

(j) minimises the incineration of waste and avoids the disposal of waste, including landfilling, in accordance with the principles of the waste hierarchy;

(k) avoids and reduces litter; or

(l) enables any of the activities listed in points (a) to (k) of this paragraph in accordance with Article 16.

Sirkulær økonomi – miljøpolitikkens salderingspost?

- En utfordring med sirkulær økonomi er at den skal fremme alle gode hensyn
- Det er en umulig å oppgave (jeg har i alle fall ikke klart det) å avgrense sirkulær økonomi mot miljøhensyn konseptet ikke fremmer
  - Definisjonen har en navngivningsfunksjon
  - Men den har ingen avgrensningsfunksjon
  - Do no substantial harm kriteriene under Taksonomiforordningen forutsetter også i stor grad at andre miljøhensyn blir ivaretatt
- Sirkulær økonomi blir særlig problematisk når klima trekkes inn som «miljø»

Sirkulær økonomi og klima

There are three key concerns relating t
CE concept. First, many proposals on t
on thermodynamic constraints that limi
from both mass conservation and mate
ignore the considerable amount of energ
(Cullen 2017). Second, demand for mater
outpace efficiency gains in supply chain
GHG emissions and other environment
CE alone an insufficient strategy to re
et al. 2018). In fact, the empirical liter
6.5% of all processed materials (4 Gt y
recycled sources (Haas et al. 2015). Th
is explained by the high proportion of
used to provide energy, thus not avail
high rate of net additions to stocks of 1
lived material stocks (e.g., in buildings a

Relevant contributions to climate change mitigation at gigatonne scale by the CE will remain out of scope if decision-makers and industry fail to reduce primary inputs (*high confidence*). Systemic (consequential) analysis is required to avoid the risk that scaling effects negate efficiency gains; such analysis is however rarely applied to date. For example, material substitution or refurbishment of buildings brings risk of increasing emissions despite improving or avoiding current materials (Castro and Pasanen 2019; Eberhardt et al. 2019). Besides, CE concepts that extend the lifetime of products and increase the fraction of recycling are useful but are both thermodynamically limited and will remain relatively small in scale as long as demand for primary materials continues to grow, and scale effects dominate. In spite of presenting a large body of literature on CE in general, only a small but growing body of literature exists on the net effects of its strategies from a quantitative perspective, with key knowledge gaps remaining on specific CE strategies. There is *medium evidence* that the CE can reduce overall emissions, energy use, and activity levels, with *medium evidence* that the sharing economy can reduce overall emissions, energy use, and activity levels, with *medium agreement* on the scale of potential savings.

he 'Avoid' strategy for
E strategies in industrial
tly, via the reduction of
y can also save monetary
d for consumption. It may
mers' need to consume
ng energy consumption)
ict or service (e.g., travel)
se, or lead to greater
kets are created. Hence,
effect is not considered

IPCC (2022) s. 545 flg

Hvilket handlingsrom er egentlig igjen?

- Dersom sirkulær økonomiske tiltak til enhver tid må ivareta alle andre miljøhensyn i tillegg til å spare naturressurser – hvilket handlingsrom er egentlig igjen?
- Dette blir særlig krevende når det ikke synes å være en konsensus eller i alle fall en fast oppfatning over hvor stor miljøgevinsten er ved at uttaket av naturressurser reduseres.
- Det er liten eller ingen politisk vilje til å ta stilling til hvordan ressurshensyn skal vektes mot miljøhensyn.

Del 3 – Mikrodilemmar

v/Einar Bratteng

Industrioppfatningen

However, approaches with respect to deciding about BP status also differ across MS. There are more restrictive approaches which adhere more strictly to the precautionary principle and other more liberal approaches.

s. 8

It should be investigated whether the application of EoW is done in line with the precautionary principle. Also, the driving forces behind deserve examination. The differences between MS are remarkable, with some MS including hazardous wastes while others indicate not to establish national or regional EoW criteria at all. The balance between the precautionary principle and the liberal market is kept differently in the different MS.

s. 20

- **Risk control versus hazard control**

The industry states that the check on hazardous properties of the substances contained by EoW and/or BP should be assessed in term of bioavailability and bioaccessibility. In other words, does the substance represents a real risk for human health and environment during all the life cycle stages? A major focus could be laid on risk control/reduction rather than hazard reduction/control. Waste classification, however, is solely hazard-based. As a result, the EoW or BP assessment by authorities tends to be a hazard based approach. Often these authorities use the hazard control approach out of respect for the precautionary principle, which is justifiable although it could hinder circular economy.

s. 130

European Commission

STUDY TO ASSESS MEMBER STATES (MS) PRACTICES ON BY-PRODUCT (BP) AND END-OF WASTE (EoW)

Reference: N° 070201/2018/793241/ENV.B.3

Final Report, 2020

prepared by
Umweltbundesamt GmbH (EAA) and
ARCADIS Belgium NV

New JRC study proposes end-of-waste criteria for plastic waste

Study to serve as foundation for Commission's implementing act

EUWID + 29 November 2024 | Stefan Lang | ~ 4 min

Bookmark

The JRC's technical proposals for EU-wide end-of-waste criteria for plastic waste are to serve as a basis for future Commission implementing acts.

A new study from the European Commission's Joint Research Centre (JRC) has developed technical recommendations for EU-wide end-of-waste (EoW) criteria for plastic waste. The work is meant to serve as a foundation for the Commission to draft future legislation with the ultimate aim of promoting recycling and the uptake of secondary raw materials while minimising the environmental impact of plastic waste.

According to the study, the EU's Waste Framework Directive (WFD) states that when establishing the EoW criteria, the Commission "shall take as a starting point the most stringent and environmentally protective of those criteria"

Hindringer i et industriperspektiv

Hva mener du er de største utfordringene for virksomheten for at avfall skal opphøre å være avfall og bli til et produkt eller råvare?

Antall svar: **13**

Svar	Antall	% av svar	
Manglende kunnskap hos miljømyndighetene om krav til produkter	7	53.8%	53.8%
For høye kostnader knyttet til å resirkulere avfall til produkter eller råvarer	5	38.5%	38.5%
Manglende kunnskap og kompetanse hos egen virksomheten	1	7.7%	7.7%
Manglende ressurser hos offentlig forvaltning	2	15.4%	15.4%
Tekniske utfordringer knyttet til å omdanne avfall til produkt	3	23.1%	23.1%
Manglende etterspørsel eller markeder for avfallsbaserte produkter	3	23.1%	23.1%
Muligheten for å få avklaring fra offentlige myndigheter om avfallet faktisk har opphørt å være avfall	8	61.5%	61.5%
Uklarhet i forhold til hvilke kvalitetskrav som avfallet må oppfylle for å kunne betraktes som produkt eller råvare	8	61.5%	61.5%

Tilbake til opphørskriteriene

Article 6

End-of-waste status

▼M4▼

1. Member States shall take appropriate measures to ensure that waste which has undergone a recycling or other recovery operation is considered to have ceased to be waste if it complies with the following conditions:

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▼B▼

(b) a market or demand exists for such a substance or object;

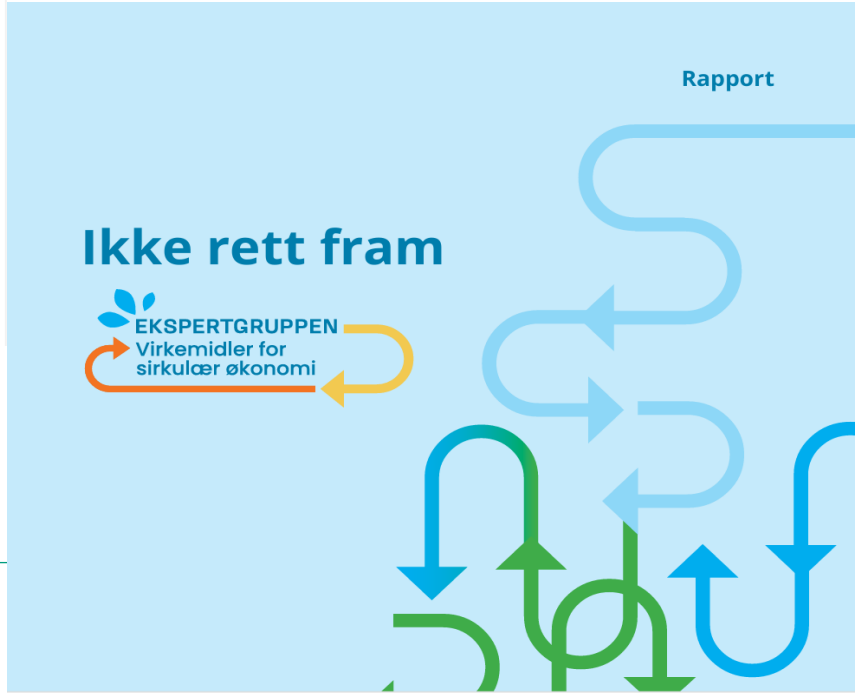
(c) the substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products; and

(d) the use of the substance or object will not lead to overall adverse environmental or human health impacts.

Foreløpig er det overlatt helt til industrien selv å ta stilling til om kriteriene er oppfylt

Vi får egentlig bare dilemmaet tilbake i mikroform når vi dukker ned i detaljene.

Hvor mye forurensning er ok, for å fremme ressursutnyttelse?



EU-domstolen og ressurseffektivitet

- Krav om å utvise «forsiktighet» ved vurderingen av hvorvidt avfall har opphørt å være avfall – medlemslandene skal avstå fra å fastsette detaljerte opphørskriterier eller foreta sak-til-sak-avgjørelser dersom dette medfører fare for tilsidesettelse av de helse- og miljøformål som rammedirektivet er satt til å fremme, jf. rammedirektivet art. 13, jf. art. 1, jf. TFEU art. 191.

- Krav om at nasjonale tiltak som begrenser opphørsfasen for avfall, må begrunnes i miljøhensyn – dokumentasjonskrav og andre prosessuelle regler som kan virke begrensende på opphørsfasen for avfall må være begrunnet i de helse- og miljøhensyn som er fremmet av rammedirektivet, og ikke gå lenger enn det som er nødvendig for at disse formålene oppnås.

C-238/21 (Porr Bau) er en veldig sentral avgjørelse (utnytting av jord).

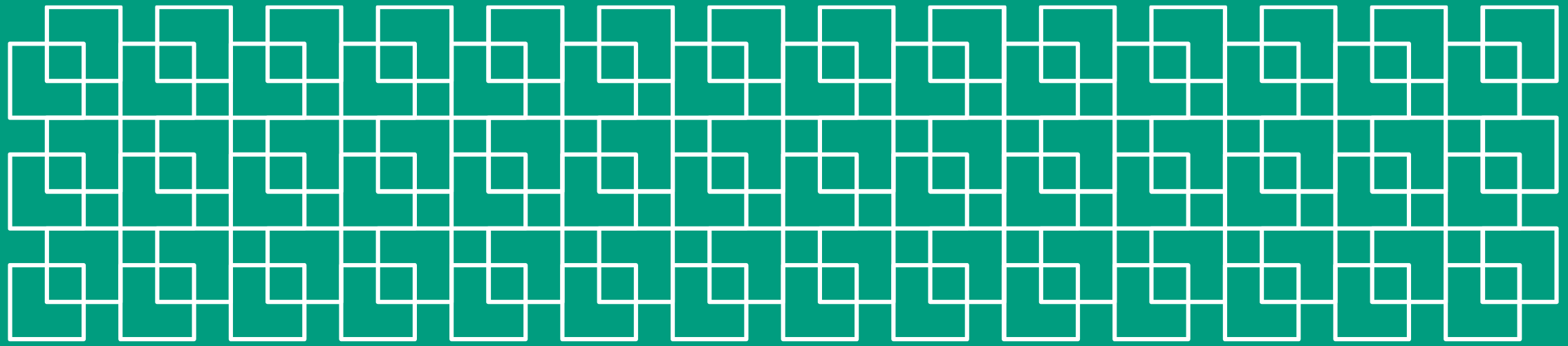
1. Helse- og miljøhensyn kommer først.

2. Det er først når disse er ivaretatt at det er aktuelt å fremme ressurseffektivitet.

Problemet – hva er godt nok?

- Min anbefaling er vel generelt å være fremoverlent
  - Det er helt tydelig at departementet ønsker at industrien selv skal ta stilling til dette
  - Da får man ta det ansvaret
  - Sørge for gode vurderinger av helse- og miljørisiko
  - Sørge for god dokumentasjon av de vurderinger som er tatt
- Forskjellen på avvik og straff

Forslag til mikroløsning

- Avfallsbesitter gis en rett, men ingen plikt til å kreve avklaring på om avfall møter de generelle opphørskriteriene i forurensningsloven § 27 tredje ledd.
- Avfallsbesitters rett til å kreve avklaring må klargjøres gjennom en endring av ordlyden i forurensningsloven § 27 tredje ledd siste punktum.
- Avfallsbesitter gis rett til å klage på vedtak knyttet til om avfall har opphørt å være avfall eller ikke.
- Avklaringer på at avfall har opphørt å være avfall tas i fellesskap av forurensnings- og produktkontrollmyndigheten. Sektormyndigheter må trekkes inn når avfall har sammenfallende eller vesentlig sammenfallende bruksområder med andre myndigheter.
- Avklaringer på at avfall har opphørt å være avfall bør omfatte fremtidige volum av den samme type avfall med samme bruksformål.

Spørsmål?