

# Bioraffinaderi

BIODRIVMEDEL – HAR DET BARA BÖRJAT?  
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# Många vill bidra till grönare transporter

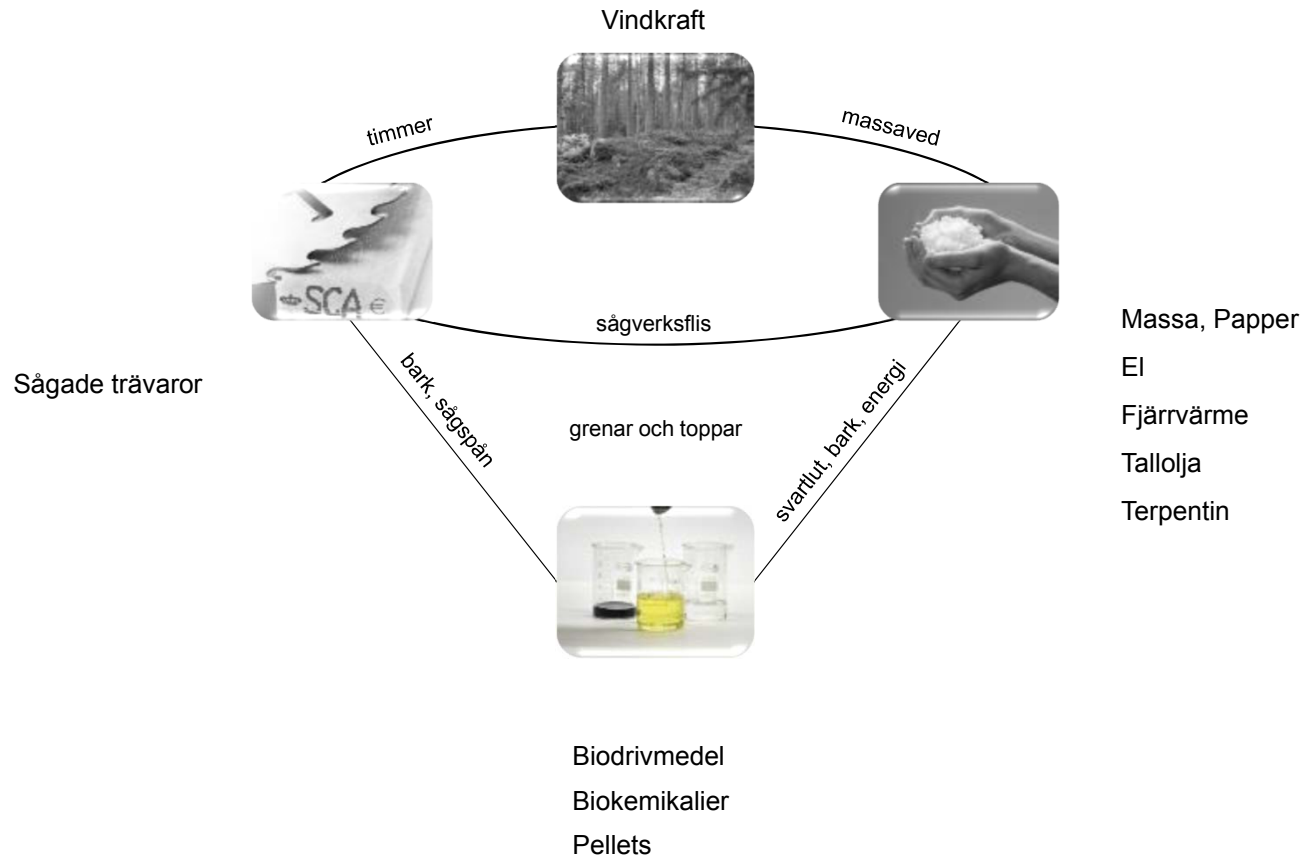


>60 länder i världen har styrmedel för att öka andelen biodrivmedel

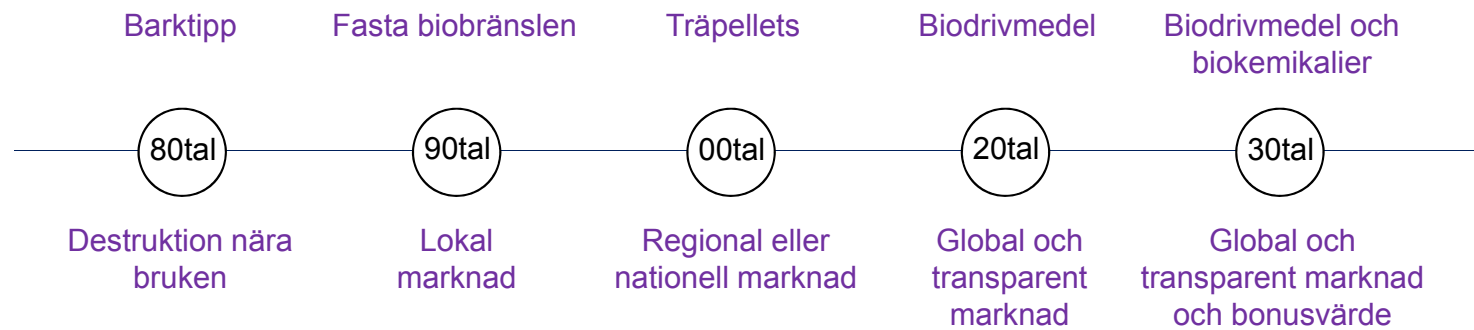
# Synergimöjligheter för framtidens massabruk



# Synergivärden i hela systemet

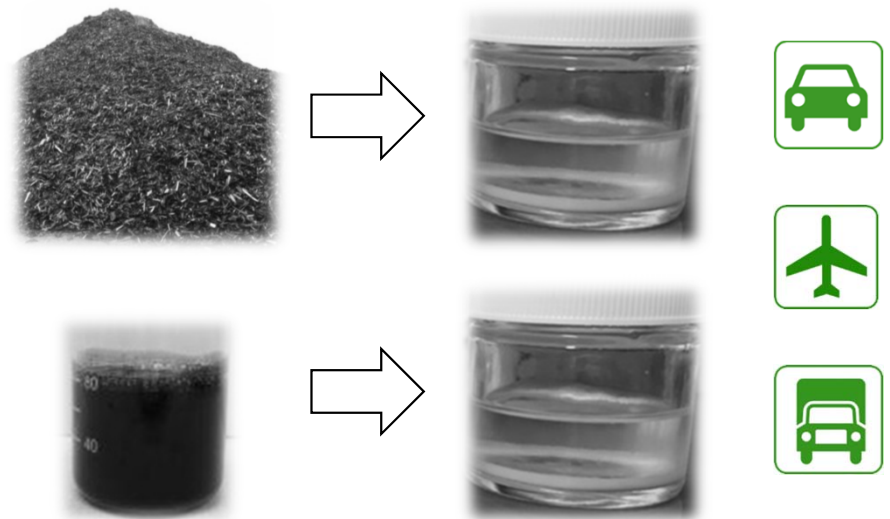


# Restprodukternas evolution



# Stor fördel att använda restprodukter

- Hållbarhetskriterier – kvalitativa
- Klimatprestanda – livscykelanalys
  - >70 % besparing är ett krav
  - Restprodukter har 0 i ingångsvärde



# Förslag RED II (november 2016)

## Annex IX

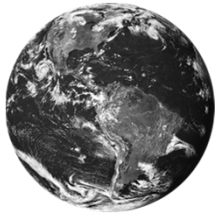
### Part A. Feedstocks for the production of advanced biofuels

- (a) Algae if cultivated on land in ponds or photobioreactors.
- (b) Biomass fraction of mixed municipal waste, but not separated household waste subject to recycling targets under point (a) of Article 11(2) of Directive 2008/98/EC.
- (c) Bio-waste as defined in Article 3(4) of Directive 2008/98/EC from private households subject to separate collection as defined in Article 3(11) of that Directive.
- (d) Biomass fraction of industrial waste not fit for use in the food or feed chain, including material from retail and wholesale and the agro-food and fish and aquaculture industry, and excluding feedstocks listed in part B of this Annex.
- (e) Straw.
- (f) Animal manure and sewage sludge.
- (g) Palm oil mill effluent and empty palm fruit bunches.
- (h) Tall oil and tall oil pitch.**
- (i) Crude glycerine.
- (j) Bagasse.
- (k) Grape marcs and wine lees.
- (l) Nut shells.
- (m) Husks.
- (n) Cobs cleaned of kernels of corn.
- (o) Biomass fraction of wastes and residues from forestry and forest-based industries, i.e. bark, branches, pre-commercial thinnings, leaves, needles, tree tops, saw dust, cutter shavings, black liquor, brown liquor, fibre sludge, lignin.**
- (p) Other non-food cellulosic material as defined in point (s) of the second paragraph of Article 2.
- (q) Other ligno-cellulosic material as defined in point (r) of the second paragraph of Article 2 except ~~saw logs and veneer logs.~~

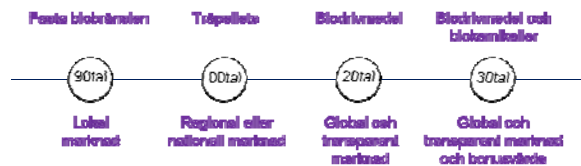
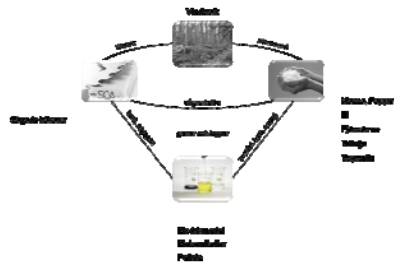
Marknaden styr



# Synergier kan skapas genom utveckling mot mer biodrivmedel och biokemikalier



>60 länder i världen har styrmedel för att öka andelen biodrivmedel



Hållbarhetskriterier – kvalitativa

Klimatprestanda – livscykelanalys  
>70 % besparing är ett krav  
Restprodukter har 0 i ingångsvärde

Annex IX i RED II:  
Marknaden styr vilken biomassa som används till vad



**Tack!**

