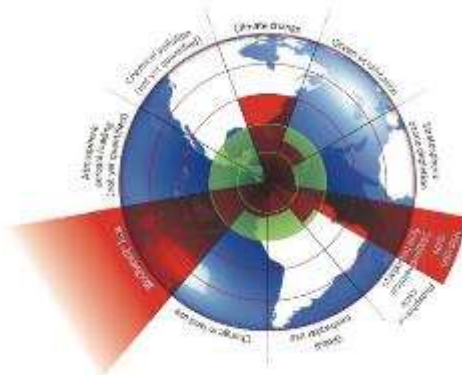


# Circular economy in food – food waste prevention in the Netherlands

Sanne Stroosnijder, 10 October 2019, Warsaw  
Programme manager Food Waste Prevention & Utilisation



# Drivers for change

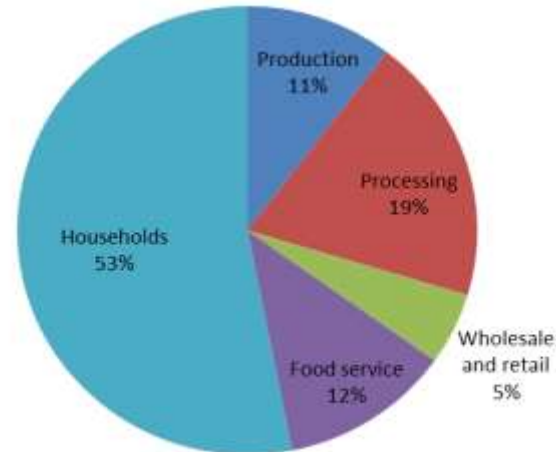


# Food waste – latest estimate EU-28



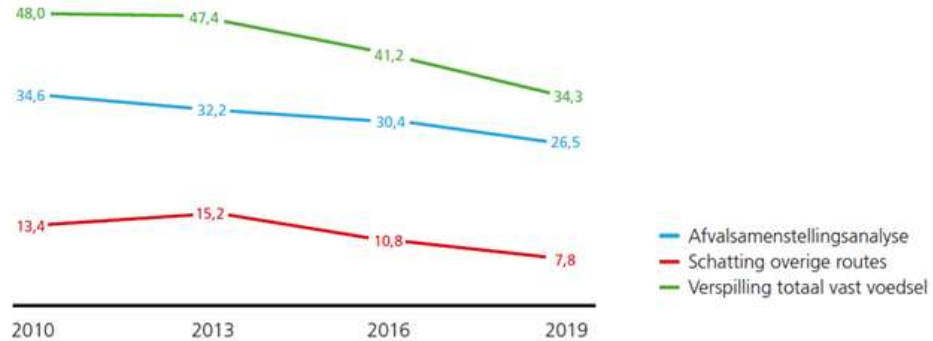
For more information on data and quantification, access the March 2016 FUSIONS reports "Estimates of European Food Waste" & "Food Waste Quantification Manual to monitor Food Waste Amounts and Progression"

- Equivalent of **20%** of all produced food in EU
- **143** billion euros
- ~ **304 Mt CO2 eq** (6% of total emissions of GHG in EU28%)



# Food waste in the Netherlands

- Cooperation between industry (sector organisations) and government since 2009
- Lots of individual actions (research, campaigns, pilots)
- But no real reduction... until now! What has changed?



**In 2016 an average of 40 kg per person per year**  
**In 2019 an average of 34 kg per person per year**

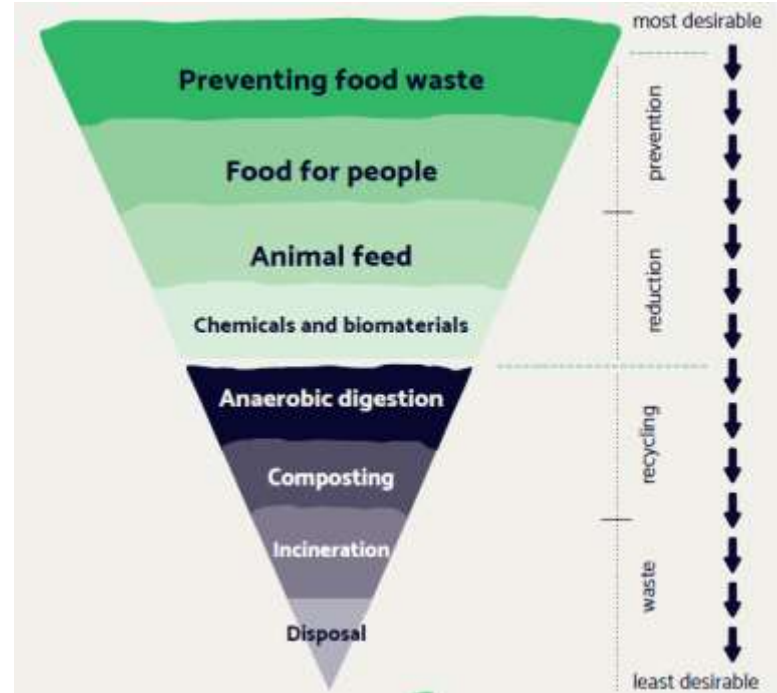
# United against food waste

- Growing consortium of 60 stakeholders from farm to fork
- Large corporate, SME and start-ups + the Dutch government
- Voluntary commitment to achieve SDG 12.3

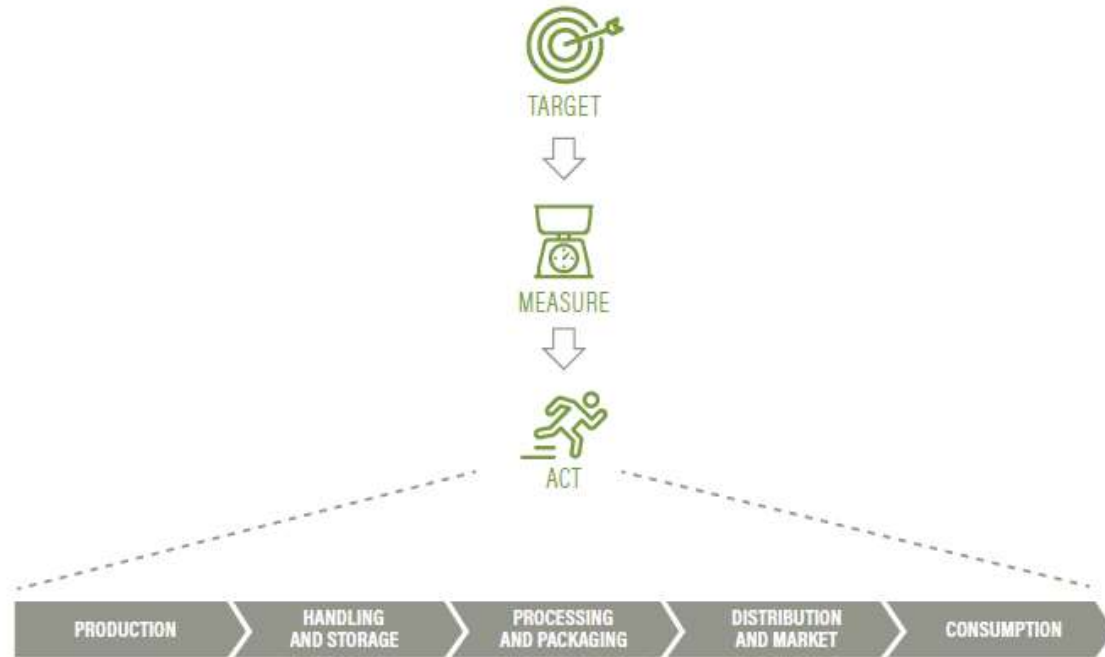


# Ground rules of the Dutch approach

- There is a food waste hierarchy
- Focus on optimum use of resources from farm to fork
- Prevention, reduction, recycling, waste valorisation



# Battle strategy = target, measure, act



# Target (international, European, Dutch)

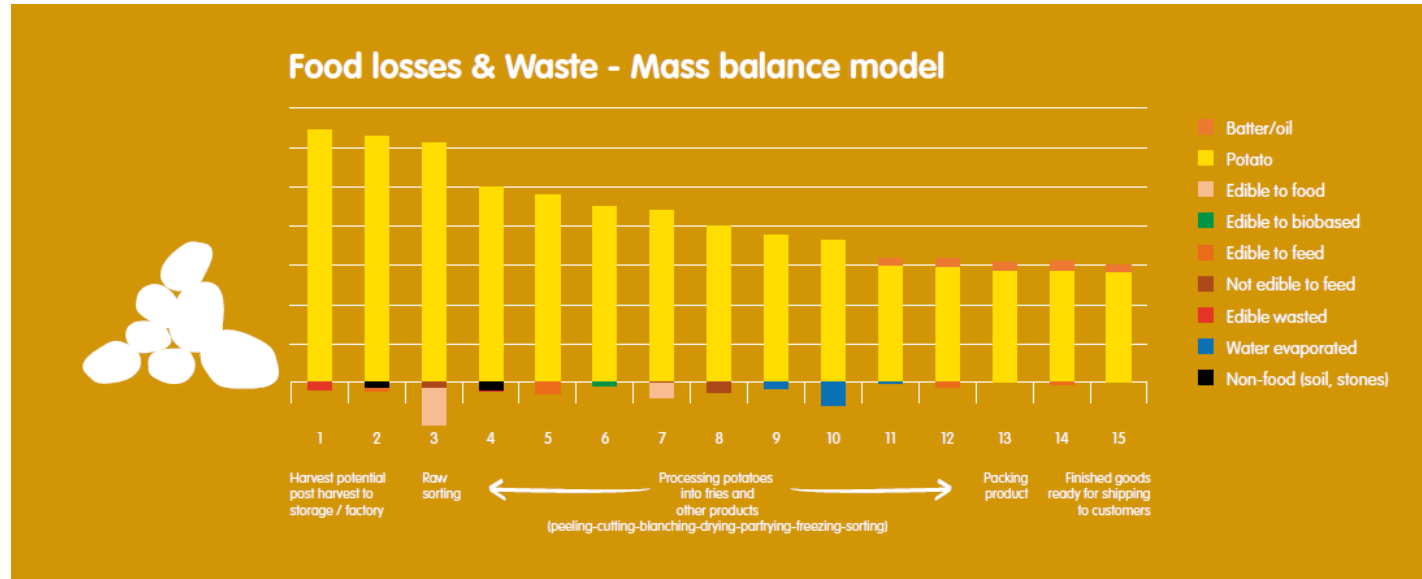


## SDG 12.3:

- By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses
- EC Circular Economy Package Target = SDG 12.3



# What get's measured, get's managed!

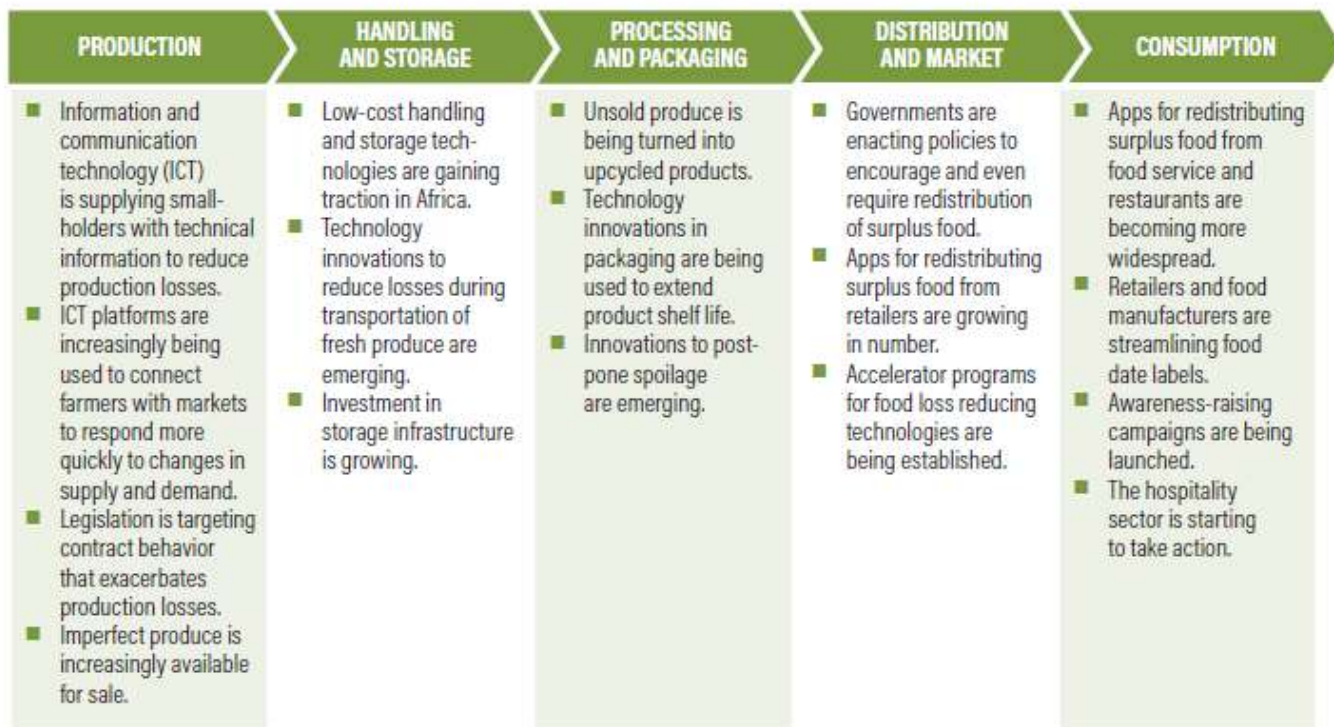


*Example Food Loss Waste Mass Balance model (field to fork study)*

<http://flwprotocol.org/>

**LambWeston**  
SEEING POSSIBILITIES IN POTATOES

Figure 5.1 | Emerging Developments to Reduce Food Loss and Waste across the Supply Chain



# “business case” of FLW

## 1. SAVE MONEY

An analysis of 700 companies in 17 countries found that investing in food loss and waste reduction yielded a 14-fold return.

### COMPANIES

-	+
EVERY <b>\$1</b> INVESTED	YIELDS <b>\$14</b> IN RETURN

- |  |   |
|--|---|
| Measuring waste           |  Selling imperfect produce       |
| Training staff            |  New products                    |
| Buying storage equipment  |  Reducing waste management costs |
| Changing packaging        |  Avoiding cost of food not sold  |

## 2. FIGHT HUNGER

The world throws out 1 billion tons of food each year while 1 in 9 people globally remain malnourished.



## 3. CURB CLIMATE CHANGE

Food loss and waste produces 8% of global greenhouse gas emissions; if it were its own country it would be world's third-largest emitter.



## 4. CONSERVE RESOURCES

It takes a China-sized amount of land to grow food that's ultimately lost or wasted.



## 5. IMPROVE REPUTATION

Reducing food loss and waste improves relationships with customers, vendors and other stakeholders.



## 6. COMPLY WITH LAWS

Government agencies and companies sometimes must adhere to regulations on disposing organic waste, including food.



## 7. UPHOLD ETHICS

Executives, staff and consumers increasingly recognize food loss and waste reduction as “the right thing to do.”



# Surplus products



*Get Inspired: This Dutch Supermarket Is Reinventing Food Waste  
Turning ugly produce into soup and food scraps into soaps!  
(source: Martha Steward.com)*

verspilling is  
vernukelijk

# Circular products



# Sustainable processing



Longer shelf life, better quality by using mild process technologies

Fresh, healthy, tasty orange juice with a shelflife of 21 days

*But does the consumer understand this product?*

# Date marking '*best before vs use-by*'



*Tesco becomes first supermarket to REMOVE 'confusing' best before date labels from fruit and veg in bid to reduce food waste*

# Plastics vs food waste

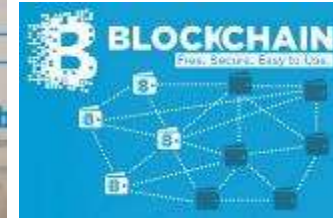
- Reusable, recyclable or compostable?  
Requires insight in production chain and consumer knowledge
- No packaging? Better forecasting, production based on demand, focus on seasons.



# Smart technologies



# New business models



# How about Poland?

- Scores relatively high on total food waste, but also a large food production industry
- Growing attention & momentum for the topic. Polish food banks as strong drivers. Who else?
- New legislation for donation in combination with educational and information campaigns

Let's discuss during our workshop!



Thank you!

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# Food for thought...

- What is the most important driver for you to fight food waste?
  - It is a waste of money (business case)
  - I feel bad to throw food away (value of food)
  - I don't want to impact the climate (reduction of CO2 emission)
- What does the Polish consumers need to stop wasting food?
- What can the Polish government / companies / knowledge institutes do to prevent food waste (depending on your position)?