



# Foresight and RRI approaches for outcome-oriented food system strategies

Thom Achterbosch  
Fit4Food2030, 24 Nov. 2020



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774088



*Well-targeted research and innovation provides potent entry points for transforming EU's food systems. (J. Bell, J. Broerse, this morning)*

- On what compass are we making EU food systems sustainable?
- Foresight is an RRI approach that is helpful for targeting research and innovation.



# Sources of inspiration



RESEARCH  
PROGRAM ON  
Agriculture for  
Nutrition  
and Health

Led by IFPRI



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774088

[www.fit4food2030.eu](http://www.fit4food2030.eu)

#FOOD2030EU

# Role of Research and Innovation (R&I) in transforming food systems

## *From Analysing the System, to Envisioning the Future, and Exploring Pathways ...*

- Understanding food system complexities and challenges
- Exploring and designing innovation and policy options for overcoming food system challenges

## *...to Experimenting, Assessing and Translating.*

- Implementing interventions and evaluation of the evidence on impact
- Anchoring and scaling



Achterbosch, Getz, Dengerink, Berkum (2019) for SCAR Food Systems  
Based on an interpretation of Matijs, Nevens, Vandenbrouck (2012) and Geels and Schot (2007).

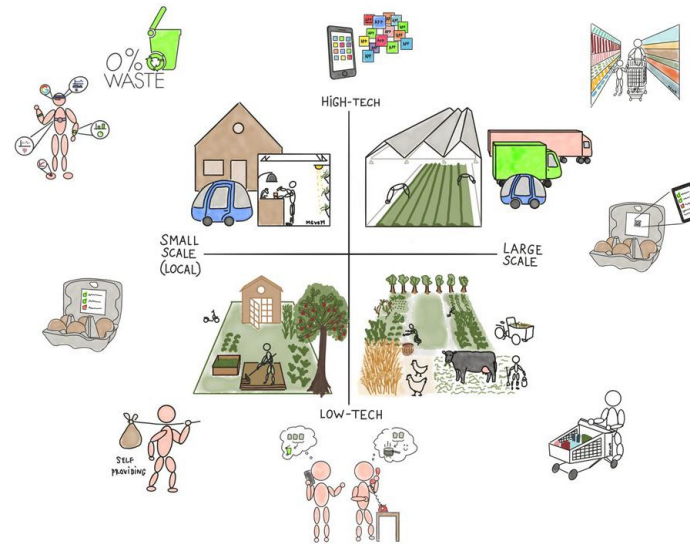


# Understanding systems, exploring pathways



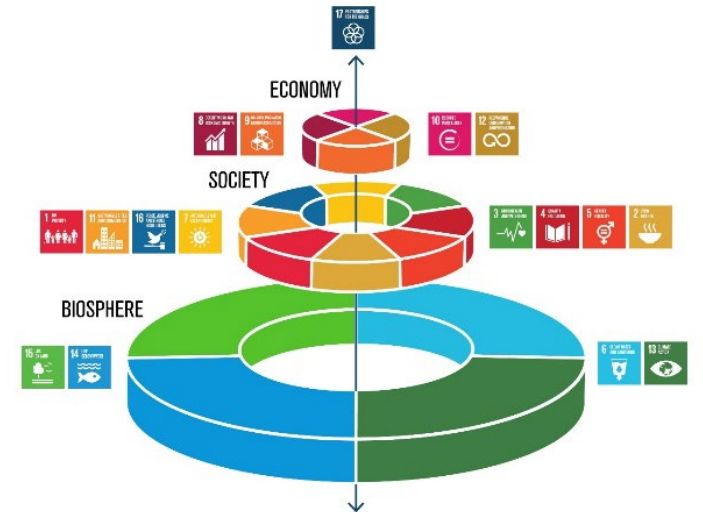
## Capture complexity

- Trends, drivers
- Voice, data, modelling



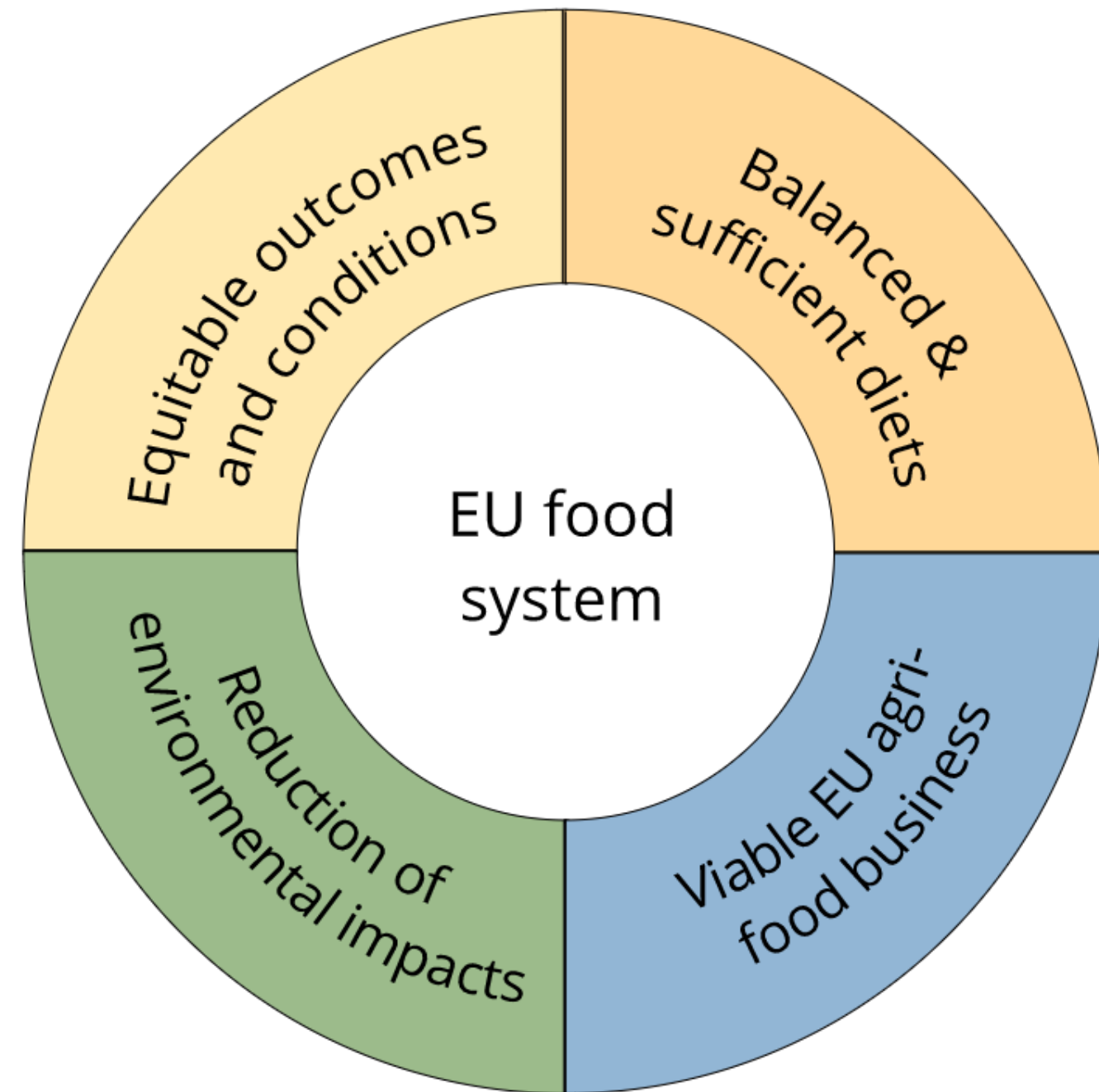
## Transition pathways

- Vision/key areas
- Instrument design



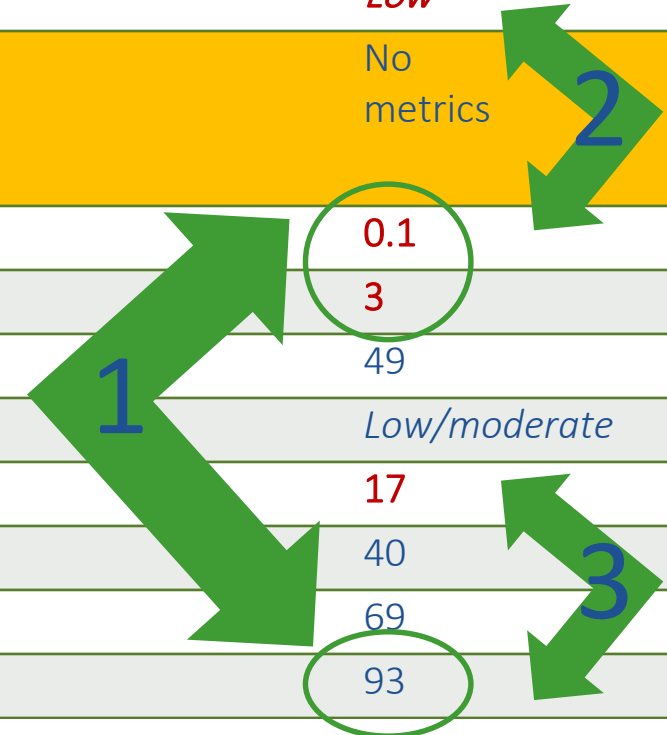
## Deliver 2030 Agenda

- On-target
- Co-benefits / trade-off



# Prioritizing: Sustainability compass of EU food systems (2)

Policy goal	Metric for assessing EU sustainability performance in 2030 against targets	Performance* from 0 (worst) – 100 (best)
Balanced and sufficient diets for EU citizens	Energy balance	Range: 48-71
	Adequate Food intake	75
	Adequate Nutrient intake	69
	<b>Minimized burden of diet-related diseases</b>	<i>Low</i>
Equitable outcomes and conditions	Equity and social justice: consumers, producers, resources	No metrics
Reduction of environmental impacts	<b>Climate stabilisation</b>	0.1
	<b>Clean air and water</b>	3
	Biodiversity conservation	49
	Preservation of natural resources	<i>Low/moderate</i>
Competitiveness of the EU agri-food business	<b>Value added</b>	17
	Productivity & innovation	40
	Job creation	69
	Carbon efficiency	93



Based on scenario projections with the SUSFANS assessment model (Frank et al., 2019) [www.susfans.eu](http://www.susfans.eu)



How does this help?





# 1 - Experimentation on the economics of food systems transformation



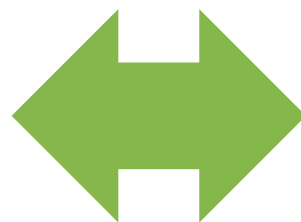
## New macro business case for sustainable EU agri-food system?

“Quality for Europe”

“Safety for the world”

“Circular systems”

“Consumer-centric”



shutterstock



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774088

[www.fit4food2030.eu](http://www.fit4food2030.eu)

#FOOD2030EU

## 2 - Integrate "mental models" in the pathways/ systems solutions

Future food



Circularity in food



Quelle: Pixabay



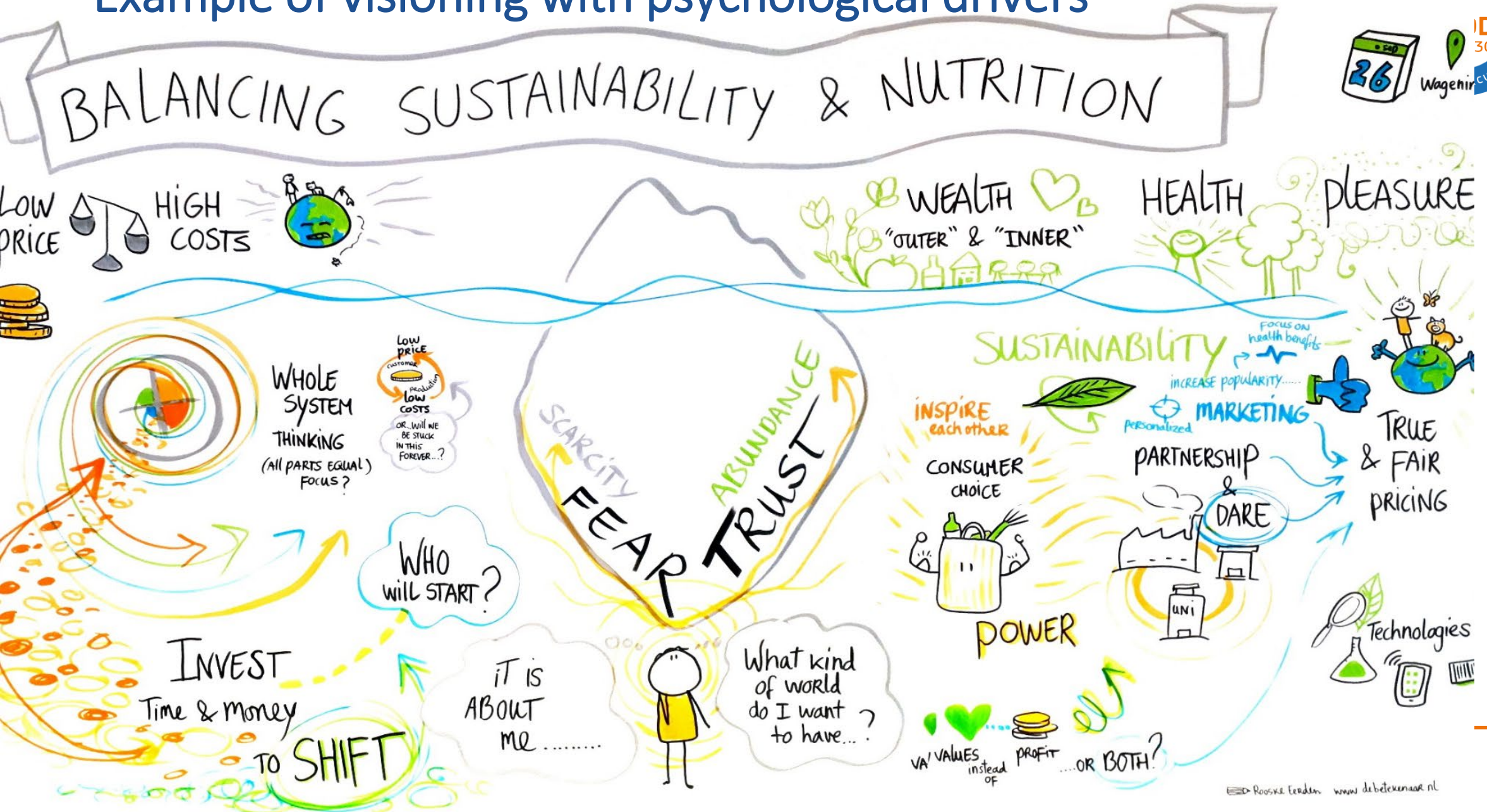
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774088

[www.fit4food2030.eu](http://www.fit4food2030.eu)

#FOOD2030EU



# Example of visioning with psychological drivers





# The field is the lab: "ground-proof" academic studies, support innovation scenarios with evidence, learn, transform



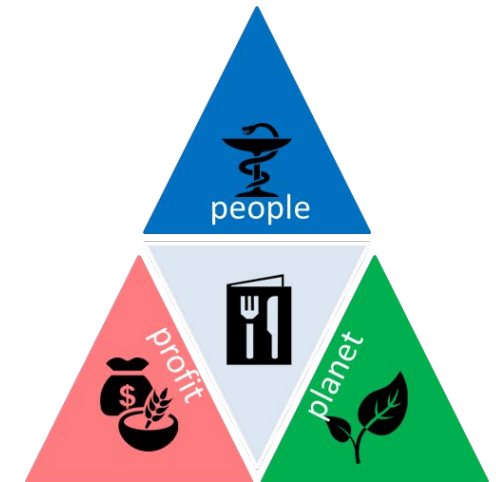
World Business Council for Sustainable Development



Diet



Underlying production systems



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774088

[www.fit4food2030.eu](http://www.fit4food2030.eu)

#FOOD2030EU

# Thank you for your attention

[Thom.achterbosch@wur.nl](mailto:Thom.achterbosch@wur.nl)

[www.wur.nl/economic-research](http://www.wur.nl/economic-research)

<http://susfans.eu>



**Towards FOOD 2030**  
future-proofing  
the European food systems  
through Research & Innovation

[www.fit4food2030.eu](http://www.fit4food2030.eu)  
#FOOD2030EU