



SUSFANS

Metrics, models and foresight for sustainable food and nutrition security in Europe

3rd Workshop of the Stakeholder Core Group

Sustainable food and nutrition security with animal-source food and seafood

Vienna, 28 Sept. 2017



Metrics, models and foresight for sustainable food and nutrition security in Europe

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SUSFANS coordinator

3rd workshop of the Stakeholder Core Group, Vienna, 28 Sept. 2017





Interdisciplinary research on
metrics, models and foresight
for sustainable food and
nutrition security in Europe

*Working with partners towards EU food systems for health,
environment and enterprise...*

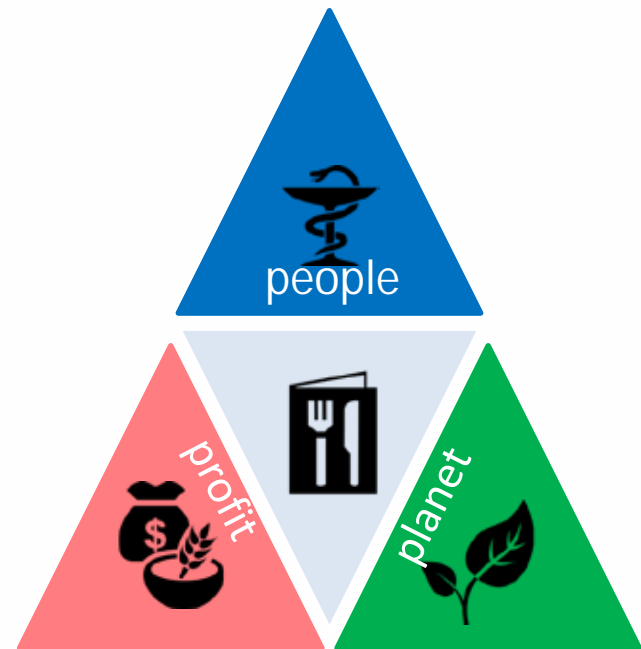
*...By delivering high-quality research on metrics, models and
foresight to support evidence-based policies and innovation
strategies for a sustainable and food and nutrition secure EU.*



European food and nutrition security



European *sustainable* food and nutrition security



EU Sustainable food & nutrition security – food system public goods and “bads”

**20-75% of cancers
is attributable to diet**

(WCRF, 1997)

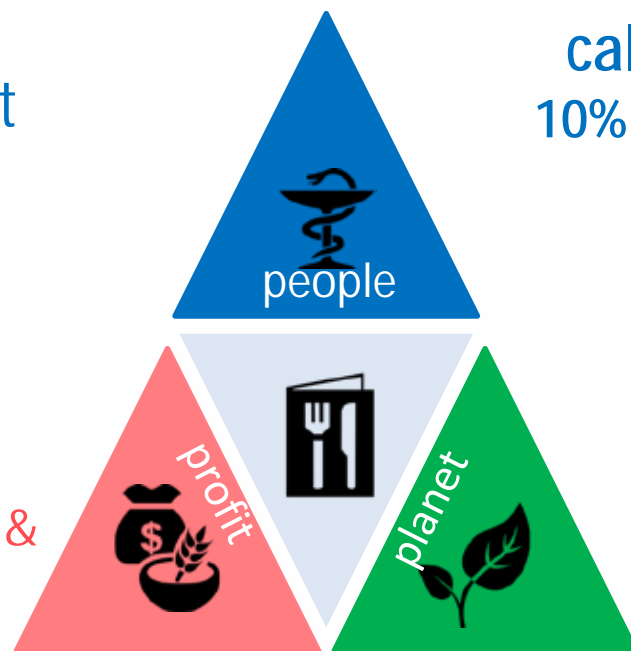
Growth & jobs

In EU MS farms, fishing & food/bev industries contribute

5-15% of GDP;

1-30% of jobs

(Eurostat 2015)



**Burden of disease;
calorie deficiency (in NMS)**
10% \searrow fruits & vegetables, \nearrow salts
8% underweight (children)

(Lim, 2010)

**5-7% of people
in NMS undernourished**
(IFPRI, 2014; Cockx et al. 2015)

**CC, resource eff.,
biofuel, food losses**
15-28% of total
GHGe is attributable to food
consumption
(Garnett, 2011)

EU Sustainable food & nutrition security – a policy view on food system

Nutrition, overweight and obesity-
related health
(COM (2007) 279)

EU Action Plan on Childhood Obesity 2014-2020

Food losses and waste
Climate change

Action Plan on (global) Nutrition

Roadmap to limit
industrial trans fats intakes

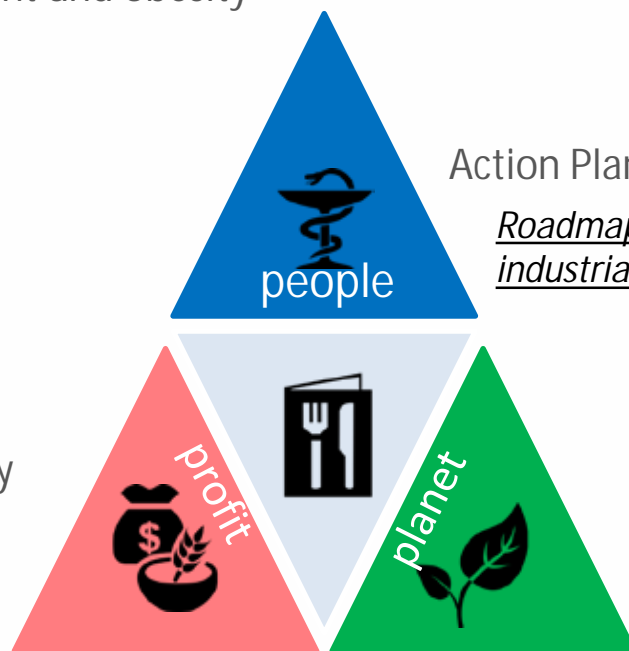
Common Agricultural Policy
(COM (2010) 672)

2020 CAP reform

Resource efficiency
(COM (2011) 571)

Ratification of Paris Agreement UNFCCC

Circular economy
(COM (2014) 398)



Arguing for European diets to become more environmentally and economically sustainable, and more healthy and nutritious

«To build the conceptual framework, the evidence base and **analytical tools**

for underpinning EU-wide food policies with respect to their impact on **consumer diets and their implications**

for nutrition and public health in the EU, the environment, the competitiveness of the EU agri-food sectors, and global food and nutrition security»

Food and nutrition security

World Food Summit, 1996

+

Sustainable food system

Contributing to health

Environmentally sound

Viable enterprise

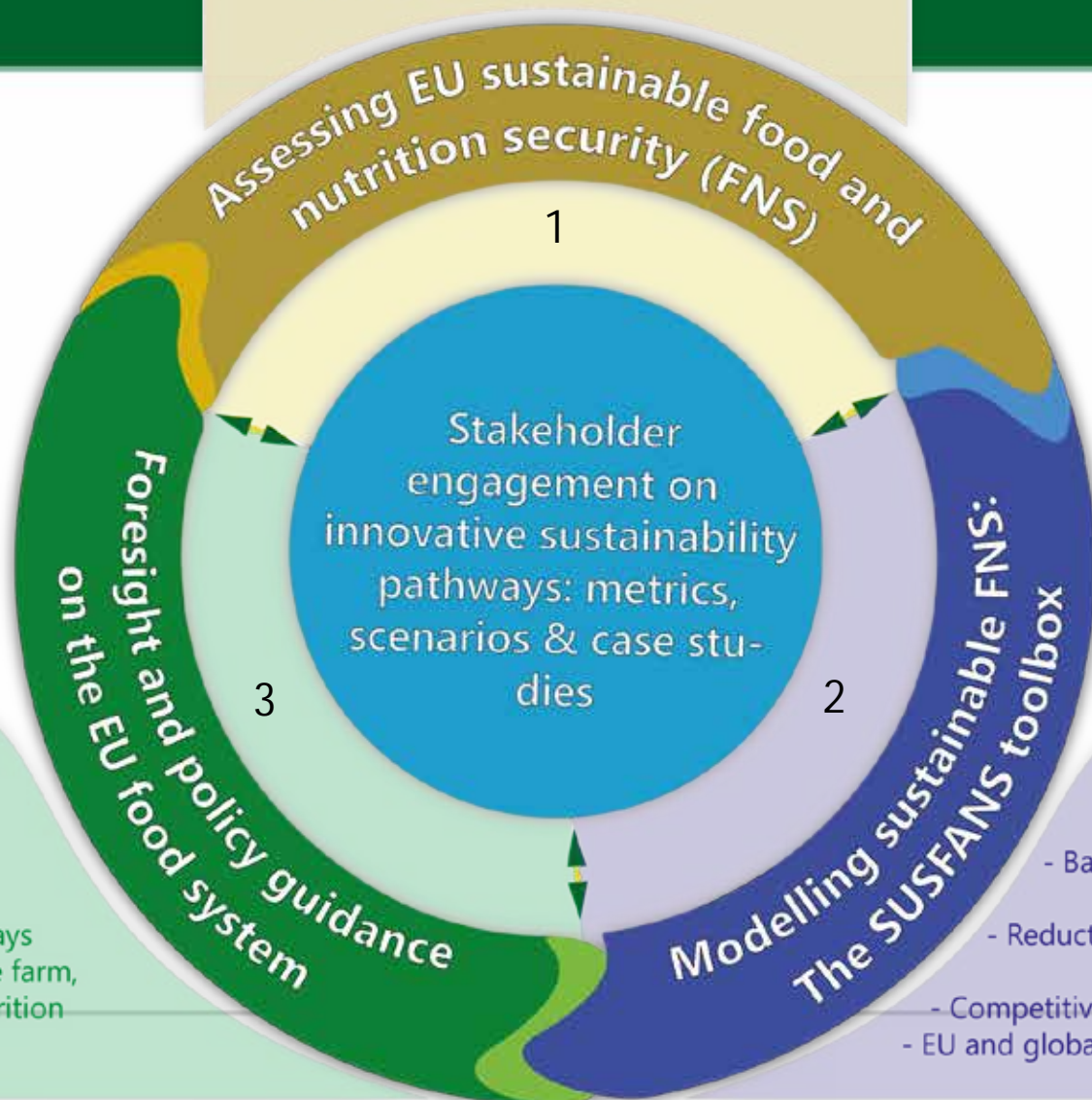
Equitable outcomes and conditions

Leverage points for sustainable nutrition (working hypotheses)

- Strengthening **EU food and nutrition security** requires more sustainable food consumption and production
- Consumer diets a pivotal tool – a shared responsibility!
- Impact of **consumer choice & diets** on society \Rightarrow decisions along entire food value chain
- **Innovation and policy** reform drive societal change
- Need analytical **tools** to inform debate

Research strategy

- Defining performance metrics for sustainable food and nutrition (FNS) in the EU
- Understanding drivers of EU diets and food production systems



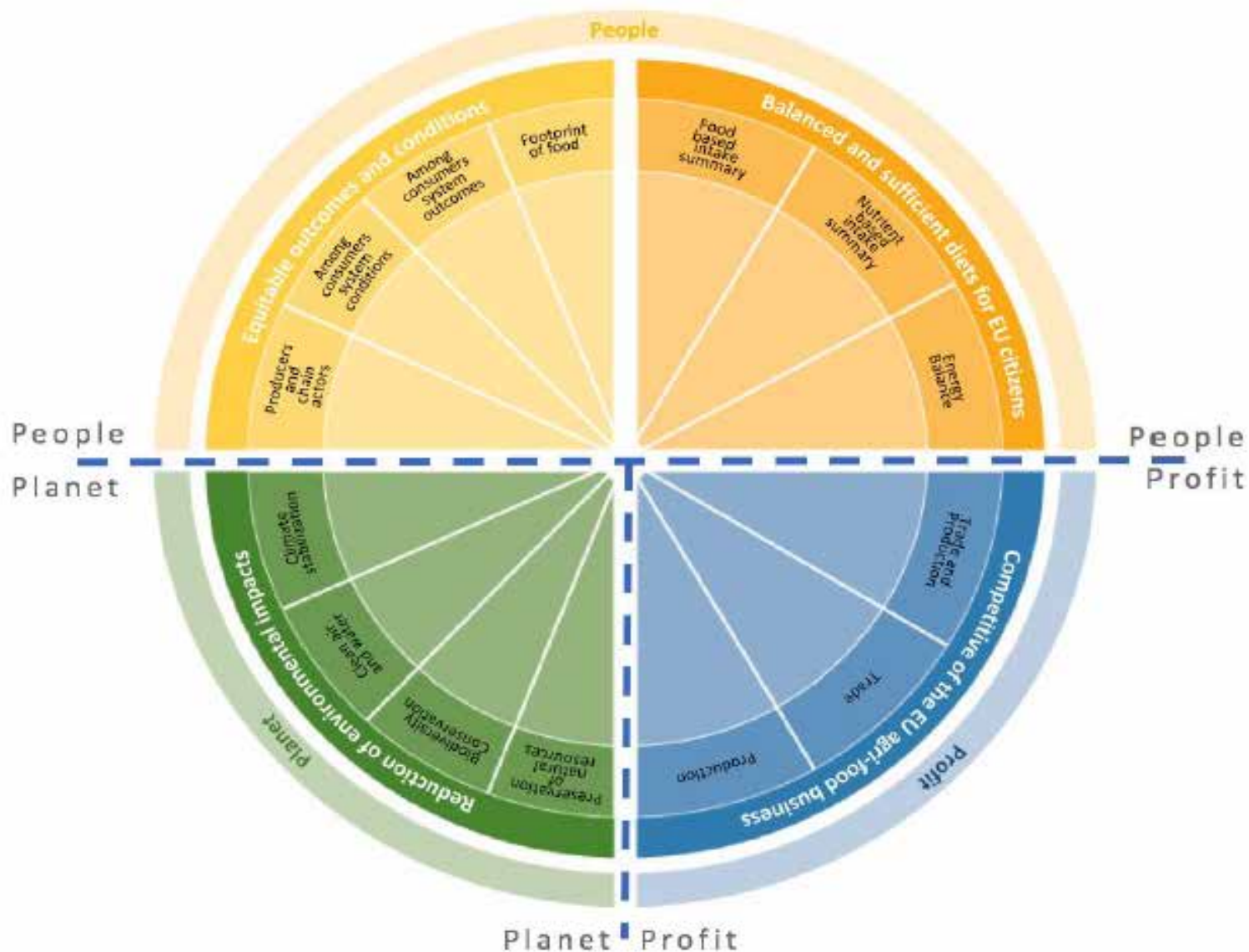
Future scenarios for EU diets and food systems

- Case studies on innovation pathways
- Underpinning EU-wide farm, fish, food and nutrition policies

Models and tools for quantifying metrics on:

- Balanced and sufficient diet for EU citizens
- Reduction of environmental impacts
- Competitive EU agri-food business
- EU and global food and nutrition security

Metrics on Sustainable FNS



Models in the SUSFANS box

Macro-economy

MAGNET
Complete economy
Income effects
Long run
Global, countries

Diet & health

SHARP
Product detail
Specific diet needs
Short run

EU4

DIET
Consumers preferences
Health & environment
Short run

EU3

Agricultural production

GLOBIOM
Spatial detail
Environmental impacts
Long run
Global, grid

CAPRI
EU detail
Production detail
Long run
Global, EU, NUTS2



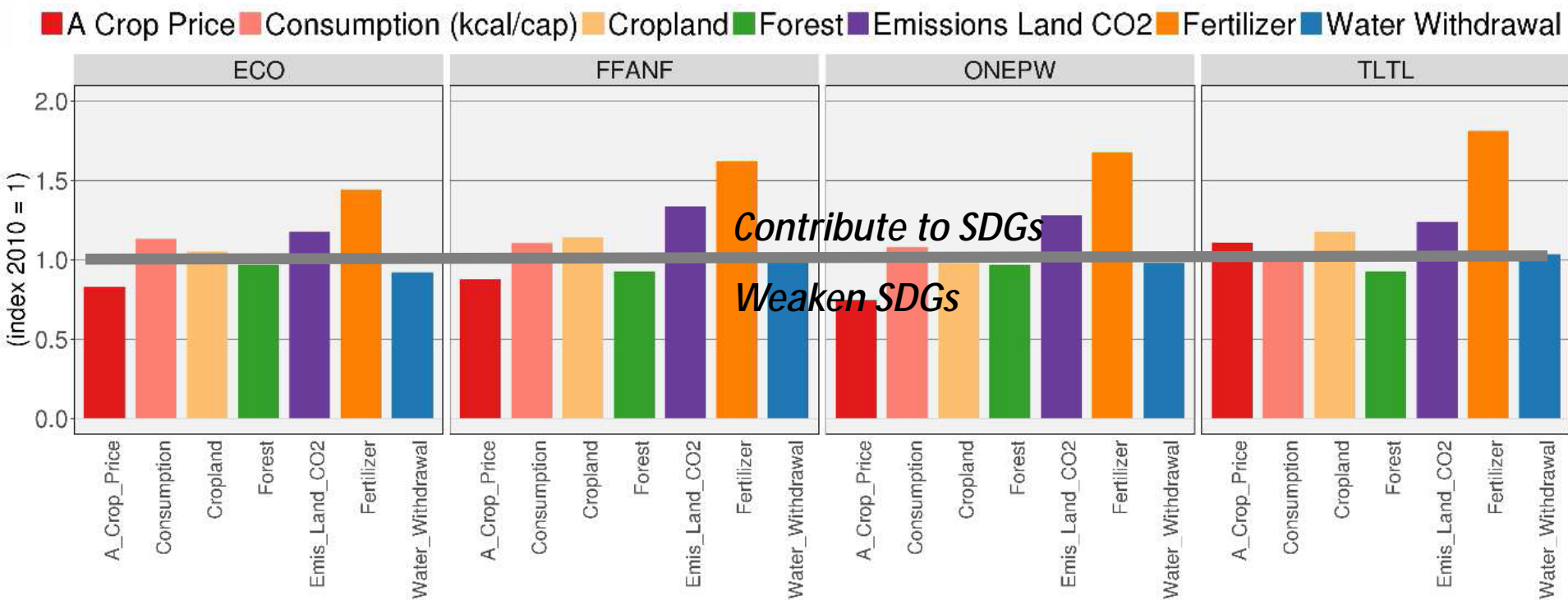
Foresight on Sustainable FNS

Trading off healthier diets and environmental goals?



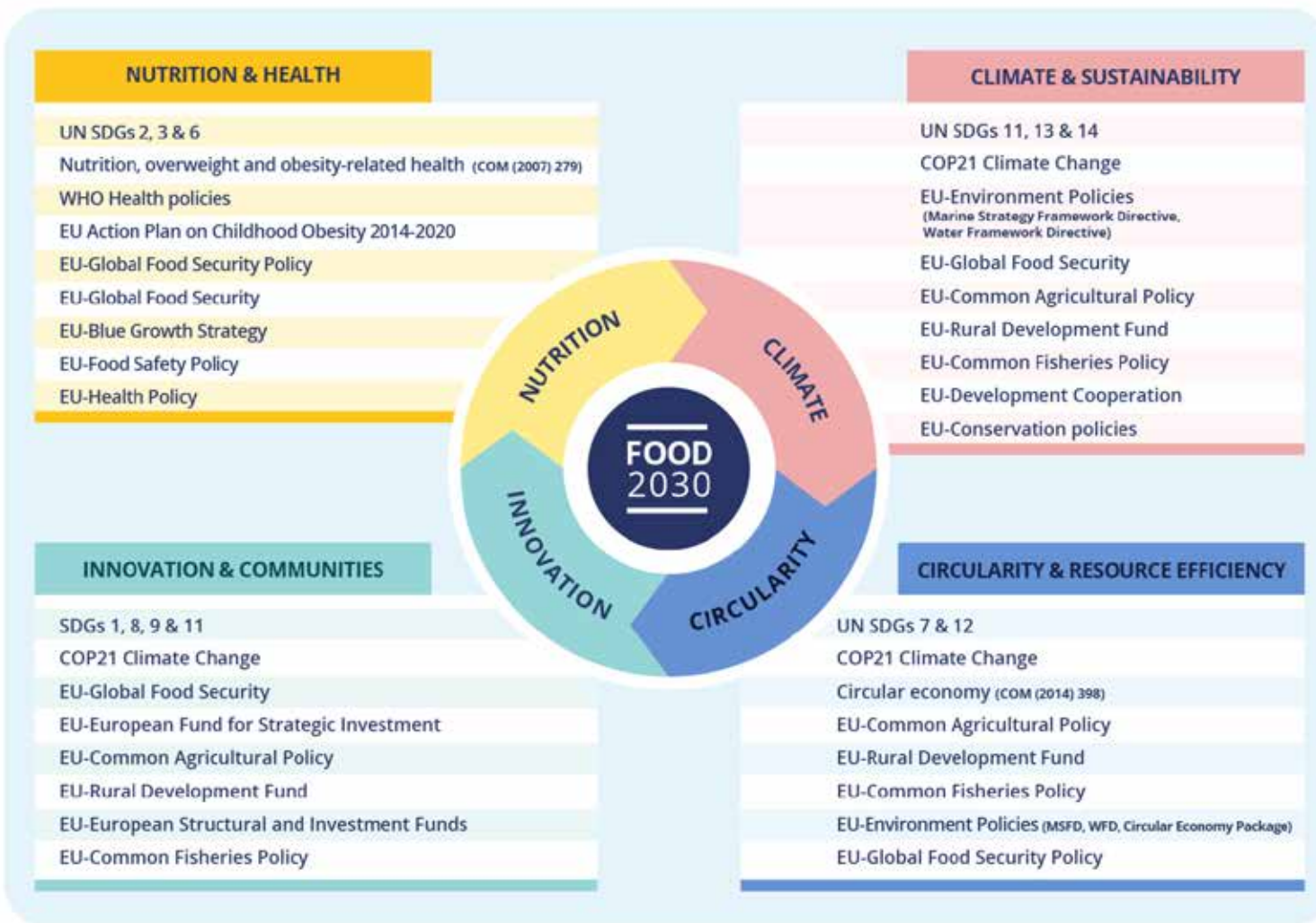
FOODSECURE
FOR POLICIES THAT MATTER

- Sustainable (ecological)
- Healthy (nutritional)
- Affordable for consumers
- Reliable re security and safety
- Preferable re consumer choice



Foresight on Sustainable FNS

Policy options for food system change





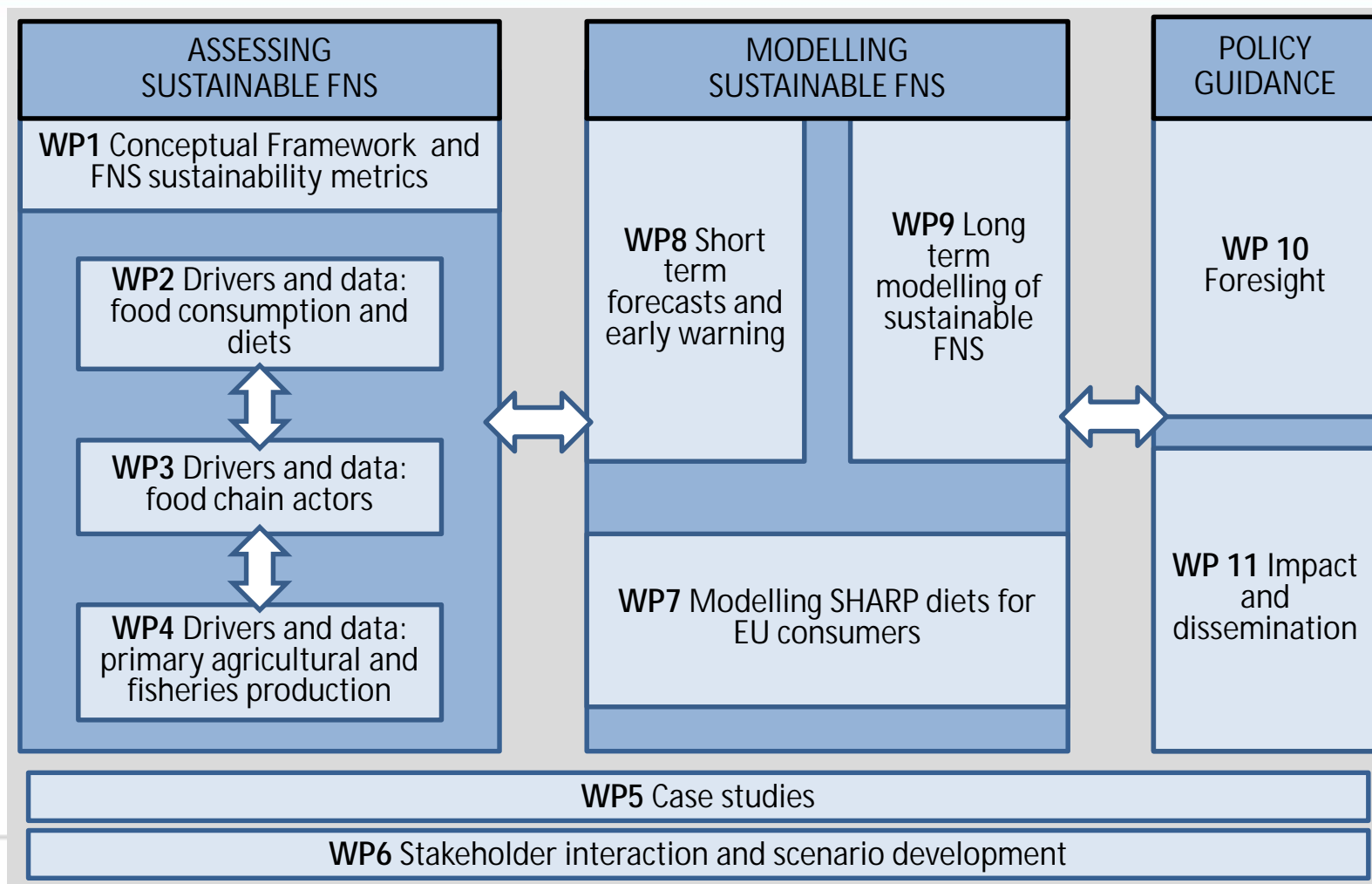
SUSFANS Research Consortium (2015-2019)



Grant no. 633692 under H2020-SFS-19A (Societal challenge 2)



Organization of research activities





SUSFANS & SHARP partnership

Development of SHARP model

SUSFANS

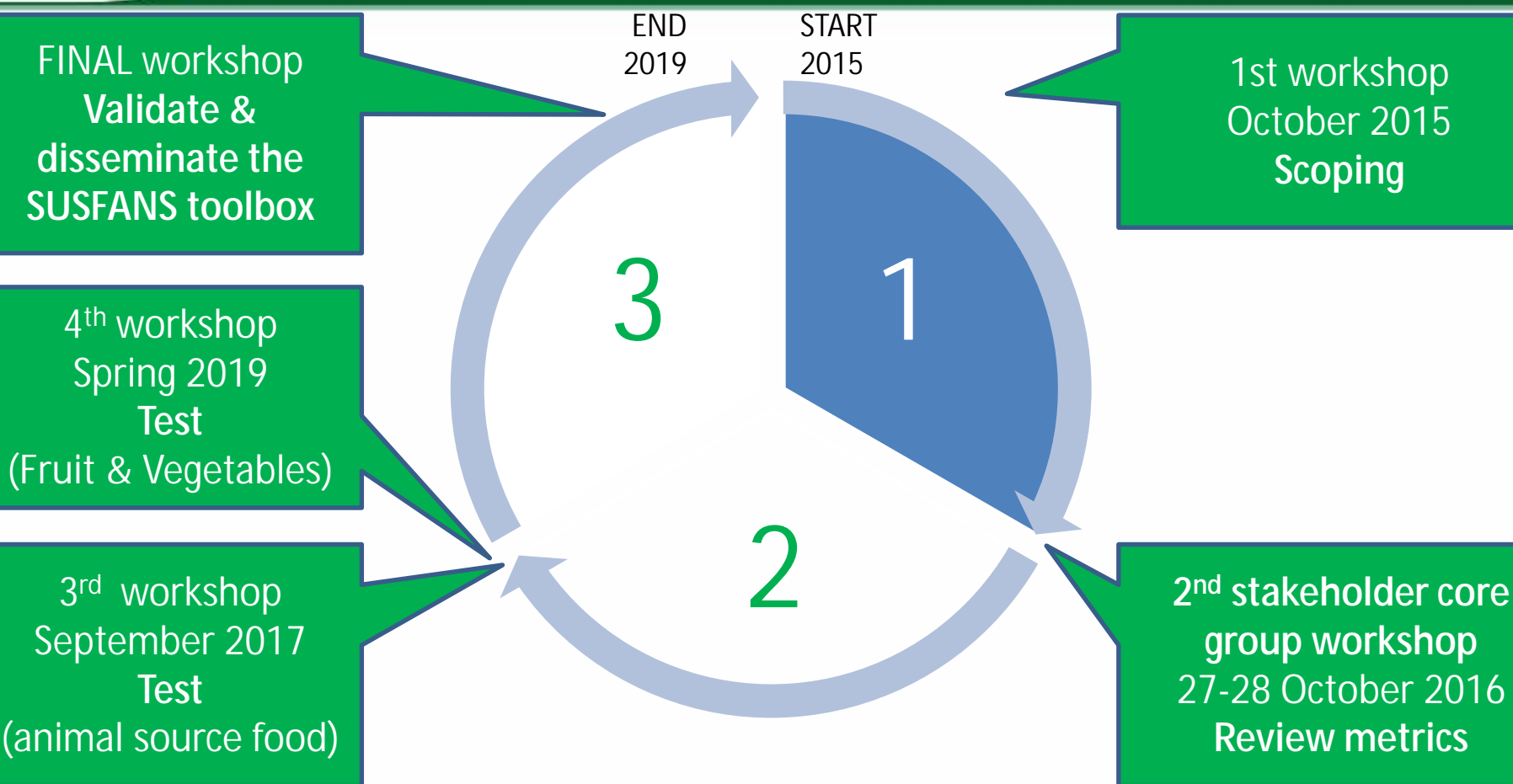
SHARP-BASIC



State of play



Project phases & stakeholder dialogue





Metrics for Sustainable FNS

Stakeholder recommendations SCG1

(Prague, 30 Oct 2015)

Balanced Diet

Focus on performance metrics that reflect 'healthiness of dietary pattern' as a whole (population segment. DASH-score? Diet diversity score? Diet diversity? 'Free or added sugar'?)

Environmental impacts

Waste, animal welfare, energy, diversity and resilience of farming system

Competitiveness agri-food sector

Revenue/turnover ratio, rate of productivity growth, people employed in particular value chain, political economy surrounding the FS

Global Food Security

Important drivers of EU food system explored (longlist in WS report). Incorporate social justice elements.





Innovation pathways for Sustainable FNS

Stakeholder recommendations SCG2

(Brussels, 27-28 October 2016):

Strategies targeting

Livestock & fish

Fruits and vegetables

Production

- Feeding food waste
- Feeding insects
- Feeding algae
- Increase digestibility of feed
- Avoid feed-food competition
- Different fish capture strategies
- Reduce waste

- Produce locally
- More organic
- Reduce waste

Consumption

- Reduce meat intake
- Replace red meat with chicken, cheese, fish, bean burgers, insects.....

- Increase intake of pulses, nuts, beans
- Increase intake nutrient-dense plant foods
- Improve fresh food chains, availability, access



Putting the SUSFANS tools to work

Stakeholder workshop SCG3 (Brussels, 27-28 October 2016):

Sustainable food
and nutrition
security in Europe
with animal-source
food and seafood



Thank you!

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