



FORESIGHT AND MODELLING FOR EUROPEAN HEALTH POLICY AND REGULATION

FRESHER Final Conference – 7th December 2017

Andrea Ricci, Giovanna Giuffrè, Sara Baiocco (ISINNOVA)
Giesecke Susanne (AIT)

- The making of the FRESHER Scenarios
- How will your health future look like? 4 FRESHER Health Scenario



FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REGULATION



The making of the FRESHER SCENARIOS



FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REGULATION



FRESHER SCENARIOS: A HIGHLY PARTECIPATORY PROCESS

More than 400 stakeholders of different disciplines and background involved in the Scenarios Building process.

- ❑ 6 regional workshops organised
- ❑ 2 Surveys submitted
- ❑ 2 High policy meetings held

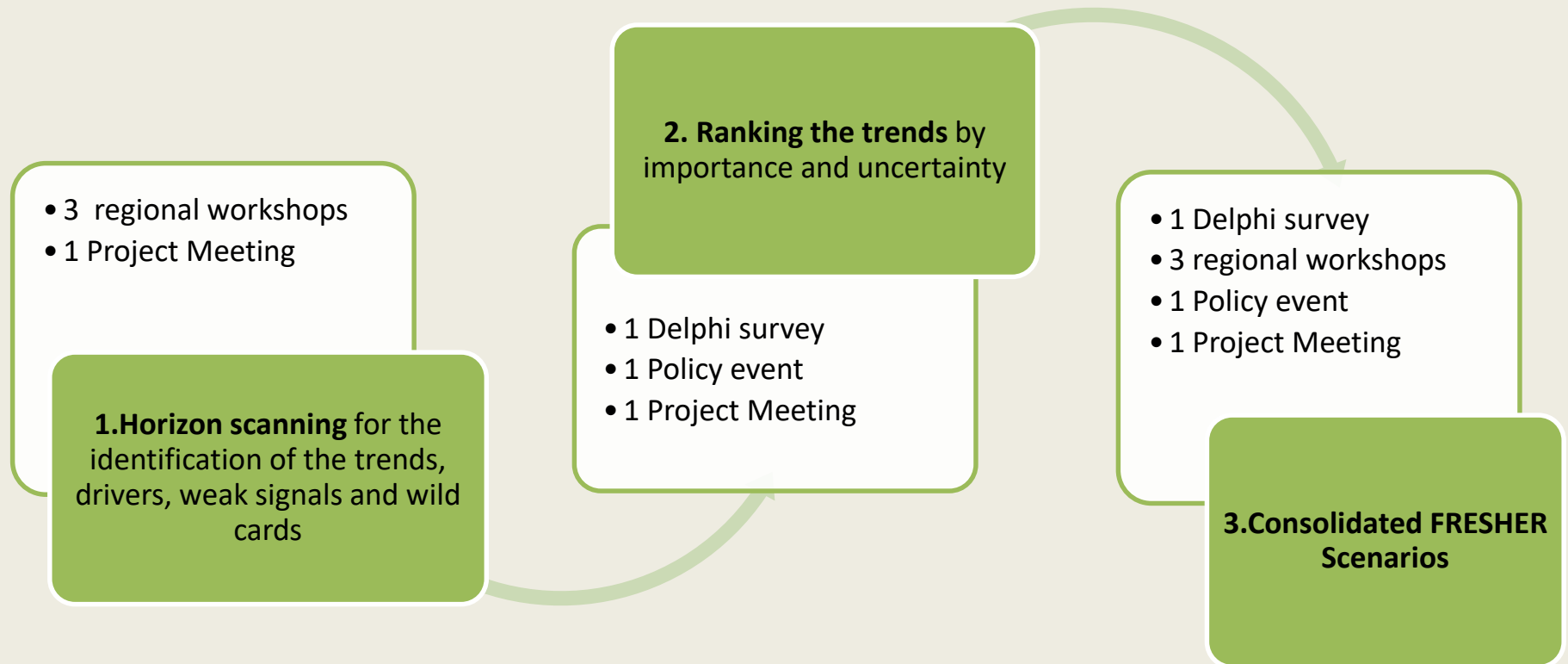


FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REGULATION



FRESHER SCENARIOS: THE PHASES

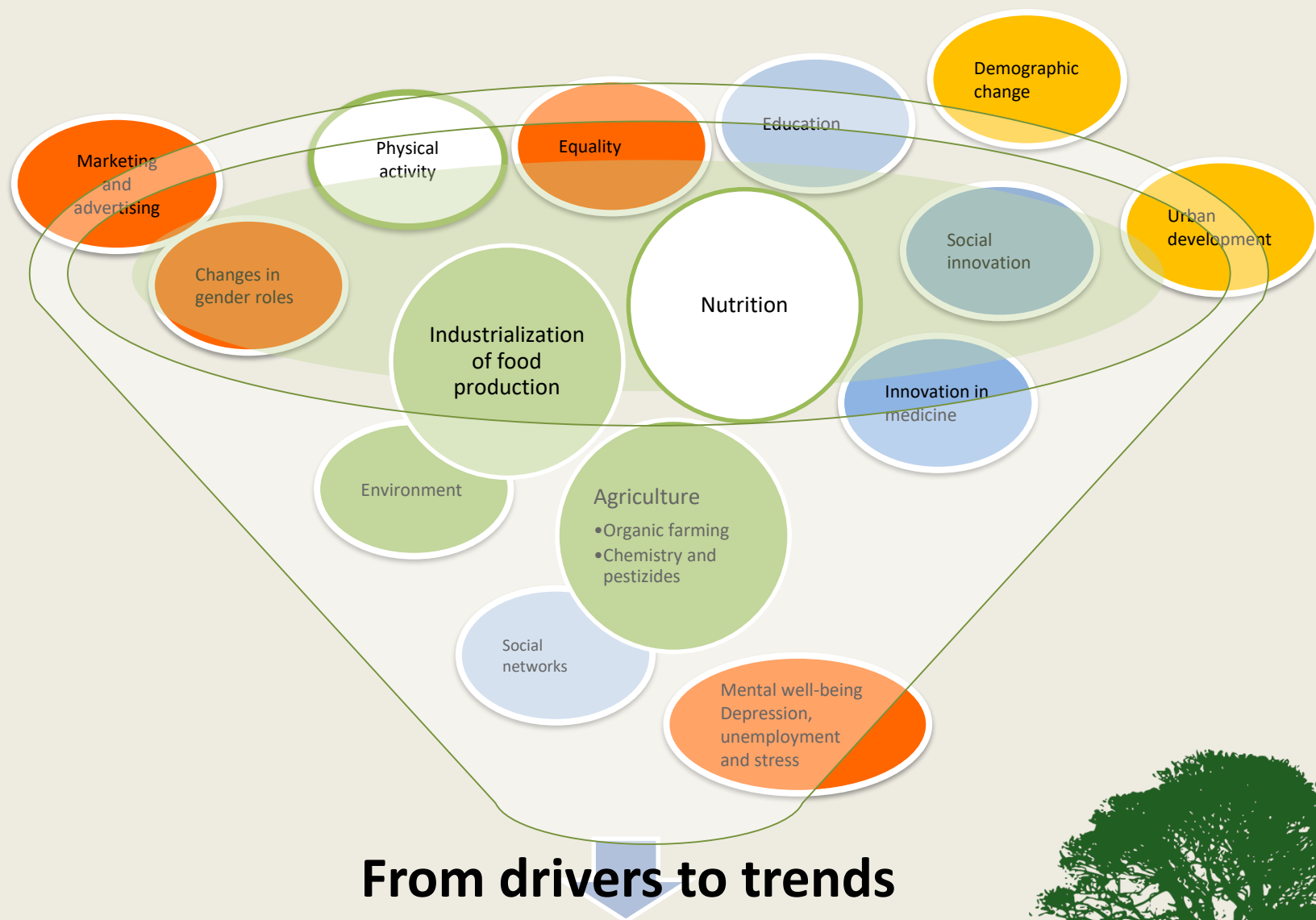


FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REGULATION



PHASE 1: HORIZON SCANNING



FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REGULATION



PHASE 2: RANKING THE TRENDS

Trends	Importance	Uncertainty
Healthy and active ageing	1	3
Equality	2	1
Integration of health and food trade policies	2	3
Healthy European cities	2	2
Integration of health and agriculture policies	3	2
Low carbon economy	4	3
New wave of medical innovations	4	2
Citizens empowerment	4	1



FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REGULATION



PHASE 3: 8 TRENDS FOR 4 SCENARIOS

Increase of GINI index	Equity	Decrease of GINI index
Stagnation, decrease of living standards	Economic pattern and tech change	Growth and higher living standards
Low cost-effectiveness in social terms	Innovation in medicine	High cost-effectiveness in social terms
Low access to info for prevention & healthy life styles	Citizens empowerment	High access to info for prevention & healthy life styles
Low access to info for prevention & healthy life styles	Climate change& low carbon economy	Decrease in extreme events and heat waves
Decrease of healthy life years	Demographic change	Increase of healthy life years
Increased exposure to air pollution	Urbanisation	Decreased exposure to air pollution
Unhealthy diets	Agriculture and global food chains	Healthy diets



FRESHER

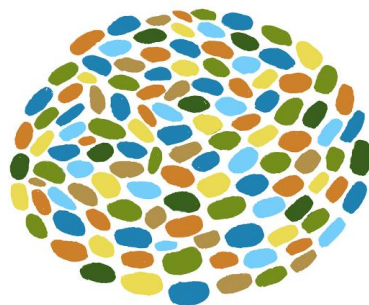
FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REGULATION



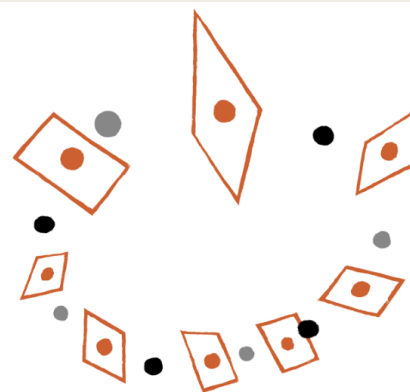
How will your health future look like? 4 FRESHER Health Scenario



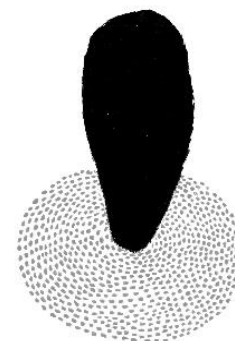
THE RICH GET HEALTHIER



HEALTHY TOGETHER



WE WILL HEALTH YOU



DESOLATION HEALTH

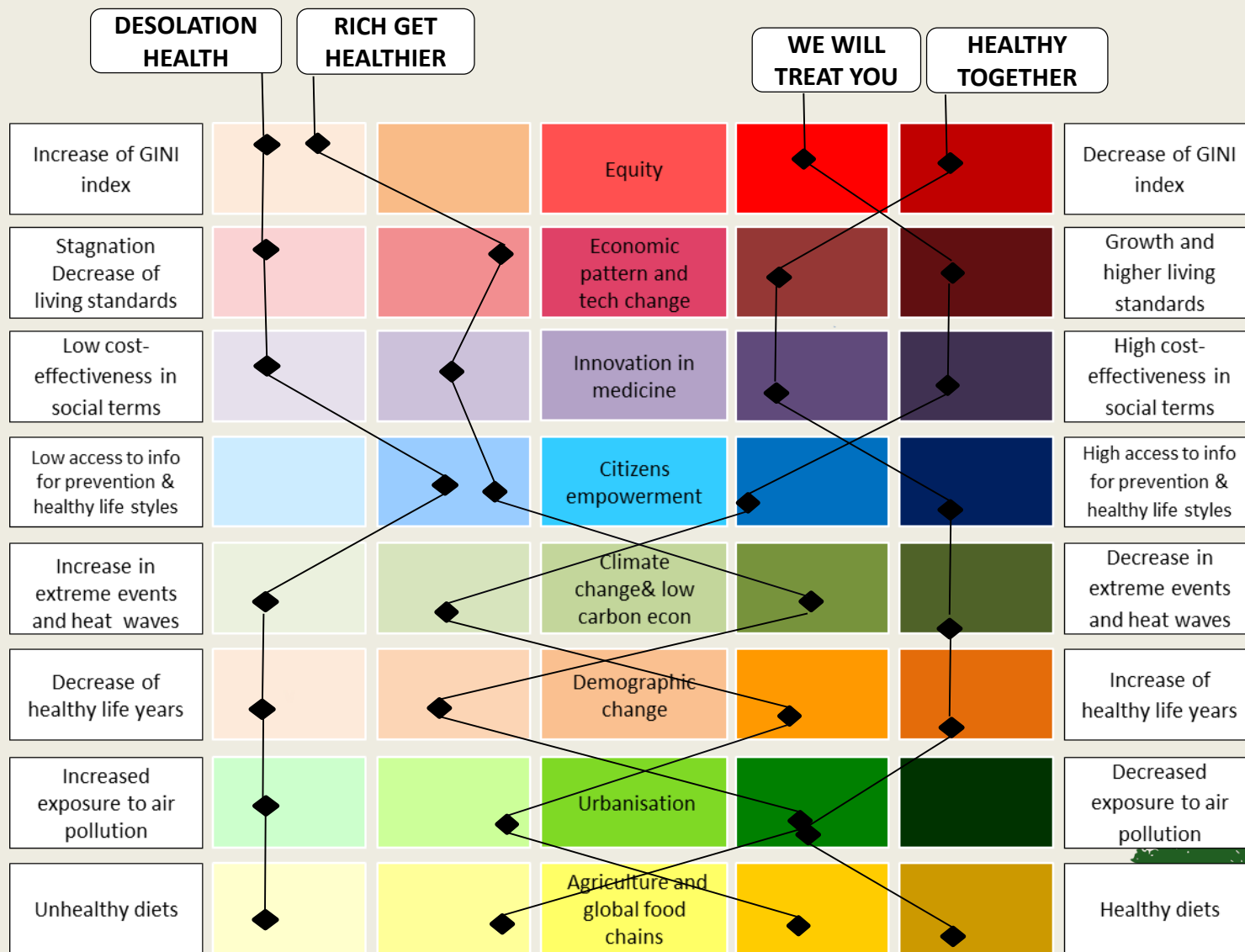


FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REGULATION



THE FRESHER SCENARIOS: AN OVERVIEW



FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REGULATION



THE FRESHER SCENARIOS: AN OVERVIEW

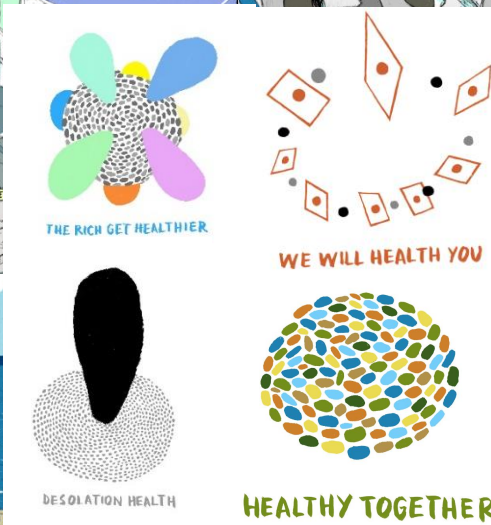
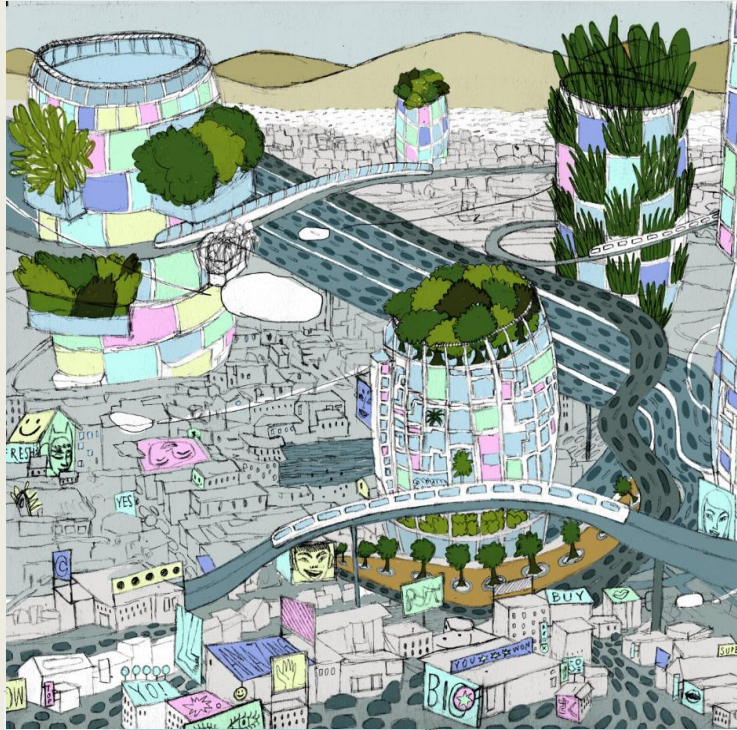
Current level in Europe	The rich get healthier	We will health you	Healthy together	Desolation health
Equity Gini index: 0.31 in 2015; Income quintile share ratio: 5.2 in 2015	↓↓↓	↑↑	↑↑↑	↓↓↓
Technological change and economic innovation GDP growth: 2.2% (2015), 1.8% (2016), 1.6% (2017); Unemployment rate: 10.2% in 2014	↓	↑↑↑	↑↑	↓↓↓
Innovation in medicine R&D investments: 2.2% of GDP in 2014; Private share: 56%; Public share: 32%	↓↓	↑↑↑	↑↑	↓↓↓
Citizen empowerment Health literacy rate: 48% pop with poor health literacy and 52% with sufficient or excellent health literacy; Access to internet: 62% pop daily	↓	↑	↑↑↑	↓↓
Climate change and decarbonisation GHG emissions (only transport sector): +21% between 1990-2012; Global mean surface temperature: +0.85°C between 1880-2012	↑↑	↓↓	↑↑↑	↓↓↓
Demographic Change and migration Healthy life years at 65: 8.16 (men and women) in 2014; Healthy life years at birth: 61.8 (women); 61.4 (men) in 2014	↓↓	↑↑	↑↑↑	↓↓↓
Urbanisation PM2.5: 16.9 micrograms per cubic meter in 2012 PM10: 24.9 micrograms per cubic meter in 2012	↑↑	↓	↑↑	↓↓↓
Agriculture and global food chains Consumption of fruits: 62.2% of pop weekly in 2008 Consumption of vegetables: 62.4% of pop weekly in 2008	↓	↑↑	↑↑↑	↓↓↓



FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REGULATION

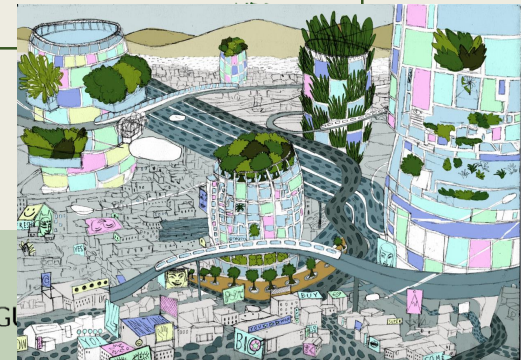




THE RICH GET HEALTHIER: A DAY WITH ANGELA

My intelligent home wakes me up with an avocado and goji seeds and reads news on the world markets to me.

- ✓ I go to work by my self-driven electric car but I have to be careful because I have to pass through an unsafe district of my city.
- ✓ I am a successful real estate agent. It has been a tough career but now I can exploit others' work to ensure a very high salary.
- ✓ Climbing the social pyramid, I have changed neighbourhood, friends and hobbies. Now I live in the posh area and I am subscribed to an exclusive golf resort.
- ✓ I now can pay for a full insurance plan, to get treatment if I get sick. And I can finally afford surgery to cure my myopia! However, I also have to buy medicine for my mother's diabetes, as she was fired from her job as a secretary after computers undertook her tasks, without retirement benefits.



FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REG

STAYING IN THE COURSE: THE RICH GET HEALTHIER SCENARIO

Equity		European countries have witnessed a rise in inequality following the privatisation waves of the beginning of the century. Wealth is now concentrated in the hands of a few who live in gated areas. Society is stratified.
Technological change and economic innovation		Digitalisation of the economy has led to high structural unemployment. Technology is owned/controlled by a limited number of private companies, pursuing profit-seeking behaviours and collecting all the productivity gains without sharing it with workers.
Innovation in medicine		Exclusive medical innovations. Innovation in medicine is financed by private companies, focusing on new health solutions for diseases affecting wealthy people , to ensure high monetary returns to R&D investments.
Citizen empowerment		Citizens are overwhelmed by commercials and information tailored by companies to shape their desires and expectations. Only few people have the knowledge and time to navigate this turbulent digital world.
Climate change and decarbonisation		Reformed international climate change panels and prices on environmental goods and services. Production is reshaped with technologies and solutions to lower emissions and meet agreed targets. Environmental goods and services are considered high priced commodities for which citizens need to pay.
Demographic Change and migration		Beyond differences between countries, today the world seems divided in income categories: wealthy strata of the population get very old and stay healthy in their ageing, while the poorest either die prematurely or experience severe conditions whilst incurring diseases and disabilities Increased global cooperation for climate and environmental issues has limited consequences on migratory flows that rise for economic reasons.
Urbanisation		Wealthier people live in similar ways around the globe with easy access to education, health services and healthy food, fast transport opportunities and ecosystem services (food, water, green areas). Conversely, those who belong to less wealthy social groups struggle
Agriculture and global food chains		Polarised agriculture and food system. While rich people eat local healthy and expensive food, the rest of the population rely on junk food from global supply chains, which ignore nutritional balance.

WE WILL HEALTH YOU: A DAY WITH WINSTON

- ✓ I wake up after 6-8 hours of monitored sleep, I take the company bus to go to work and when I arrive the first thing I do is download the data from my implanted microchip, to ensure that I am not negatively affecting my health status and productivity performance with my lifestyle.
- ✓ My friends are my colleagues. With them I eat healthy and nutritious food in the canteen and go spinning in the company sport centre during work breaks.
- ✓ Thanks to being highly-skilled and continuous training, I programme the fully automated assembly line of a European trucks company. I do not have much spare time, but my salary is fully satisfying and similar to that of my boss.
- ✓ When I feel sick, I first report to the company doctor, who, when necessary, refers me to the public healthcare system.
- ✓ I use the apps to sort out everyday life problems and for online training courses.



FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND RE



SUSTAINED INNOVATION FOR A HEALTHY WORKFORCE:

WE WILL HEALTH YOU SCENARIO

Equity	↑↑	In a competitive world, equity is reached in the EU by ensuring that economic growth leads to (some) social progress. In Europe, equity is improved thanks to the new wave of economic growth and targeted redistribution policies.
Technological change and economic innovation	↑↑↑	Europe is a dynamic and innovative economy competing with emerging economies' cost advantage by delivering high-quality goods and services. The European knowledge society, led by a top-down approach- makes the most of technological advancements although the boost in productivity does not entail any radical changes in the production system.
Innovation in medicine	↑↑↑	Breakthrough in personalised medicine. Thanks to government- managed big data, implanted chips and gene scans personalised prevention and treatment, including tissue regeneration, are accessible.
Citizen empowerment	↑	Uniform society in which on line information is strictly controlled. A new order is set in the digital world, now governed by an alliance of governments, industries and citizens' representatives to serve public policy goals.
Climate change and decarbonisation	↓↓	Growth beyond environmental limits. Increases in production and consumption put pressure on ecosystems. Green investments are only undertaken if economically profitable.
Demographic Change and migration	↑↑	Europeans are old but healthy and work longer to sustain themselves and to be part of the work-oriented society. Migration rises but the EU accepts only those who can match the qualification needed in the EU economy.
Urbanisation	↓	Cities are the engine of growth and first and foremost place to work. Urban planning aims at offering the optimal condition to work (housing, transport and health services) and disregard everything that is not related to productivity, including environmental issues.
Agriculture and global food chains	↑↑	Industrialised agriculture. There is widespread use of chemicals and biotechnologies to increase agricultural production. Food is produced in laboratories and diets are monitored to ensure the intake of balanced nutrients.

HEALTHY TOGETHER – A DAY WITH MAYA

- ✓ I wake up without an alarm clock as I enjoy flexible hours and my workplace is generally at a walking distance if not at home;
- ✓ I have created an on-line company to recycle plastics and am also involved in local initiatives. I furthermore share best practices in international networks. I don't earn much but why should I need more?
- ✓ I meet my extended family and friends every day. Sometimes we go together to pick and cook our own vegetables, other times we play frisbee in the park or go for a drink.
- ✓ When I feel sick, I ring my neighbourhood doctor who knows me well because I live nearby and send health data on myself on a monthly basis.
- ✓ I use apps not just for looking for information but to find people with whom I share interests. As example I use the social street apps to take care of the flowerbed down the street.



FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND RE

PROMOTING HEALTH AND WELL BEING FOR ALL:

HEALTHY TOGETHER SCENARIO

Equity	↑↑↑	Equity is a global goal and goes hand in hand with sustainability goals. Equity is fostered by highly inclusive social policies, delivered through new welfare schemes and innovative social protection programmes, New metric of development promote community engagement and explore completely new solutions
Technological change and economic innovation	↑↑	Digitalisation has facilitated the transition towards a circular economy and reshaped society. Machines are used to decrease working hours and the gains from the increase in productivity are shared among workers through social dialogue.
Innovation in medicine	↑↑	Disruptive innovation and access to medical innovations enhances treatment outcomes and prevention on a personal and community level. Progress in medicine is made thanks to new organisational practices.
Citizen empowerment	↑↑↑	Slow society, diversity of cultures. Citizens are well educated, connected, and aware. Citizens have reached a level of empowerment that allows them to use social networks to enhance their public engagement and look for health support when needed.
Climate change and decarbonisation	↑↑↑	Circular and decarbonised economy. Any investment is assessed against social and environmental goals. Everybody contributes to reduced carbon emissions.
Demographic Change and migration	↑↑↑	Elderly citizens are healthy and active in society thanks to the combined effect of individual behaviours and welfare reform. Thanks to a new global coalition to promote the sustainable development of most of the world's regions, there is a recognised right of free movement of people but number of migrants is reducing.
Urbanisation	↑↑	Smart and environmentally and socially just cities. Cities are greener, less congested and less polluted thanks to smart urban solutions and the engagement of citizens' networks.
Agriculture and global food chains	↑↑↑	Local production of food and urban gardening. Sustainable agricultural practices are widespread and people prefer to consume fresh local food, due to an awareness of health benefits and the assignment of a social value to it.

DESOLATION HEALTH – A DAY WITH OLIVER

- ✓ Every morning I wake up very early to check in on my company app, so that I can get assigned as many deliveries as possible.
- ✓ I am a delivery boy for a food app, but I am thinking to migrate because I cannot make a living out of this job.
- ✓ I have little time between one delivery and the other, so I stop in fast food restaurants to eat, which is always packed with unemployed people.
- ✓ Getting around the cities is becoming more and more dangerous because of the road conditions and rising criminality.
- ✓ The waiting list in the public healthcare system is always too long and I never manage to get a visit. When I get sick I search on the internet for information to get well, but it is very hard for me to find reliable websites without advertisements.











FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND



HOW IT COULD GO WRONG:

DESOLATION HEALTH SCENARIO

Equity		European society is highly unequal due to the collapse of social policies, ever-lasting economic stagnation, the inadequate organisation of public authorities and widespread corruption.
Technological change and economic innovation		Technological change has continued in terms of digitalisation but most EU countries have failed to take advantage to create new jobs and re-organise economic activities . EU countries have lost their competitive advantage in the world market.
Innovation in medicine		No significant discovery in medicine . Investments in R&D are stagnating and undertaken only by big pharma in partnership with insurance companies. These actors focus on expensive quick-fix health solutions and drugs.
Citizen empowerment		Internet is used to escape reality . More than before citizens need to live in a 'second life' on the internet and are willing to sacrifice social interactions to maintain their on-line "status". There is an increase of the use of on-line games in the health sector to help promote and test medicine and treatments.
Climate change and decarbonisation		Environmental break down and economic war over resources . Environmental resources are scarce and cause conflicts worldwide. Climate change is worsening, causing continuous environmental emergencies and threatening human survival in many areas.
Demographic Change and migration		The European population has aged without taking any precautions with regards to health insurance, relying on the existing but failing European social security of previous decades . The public healthcare sector is collapsing in most countries. Europe is no longer an attractive place for migrants with a wave of migration of European citizens underway.
Urbanisation		Cities are constantly engulfed in financial crises due to the impoverishment of the population and persistent corruption. As a consequence, the provision of essential services is reduced. People live in polluted, chaotic cities that are characterised by insecurity and violence .
Agriculture and global food chains		Proliferation of global food chains. Few big corporations have monopolies and commercialise highly processed food . The intake of nutrients is highly unbalanced and the variety of food is low.

Thank you!



FRESHER

FORESIGHT AND MODELLING FOR
EUROPEAN HEALTH POLICY AND REGULATION

