

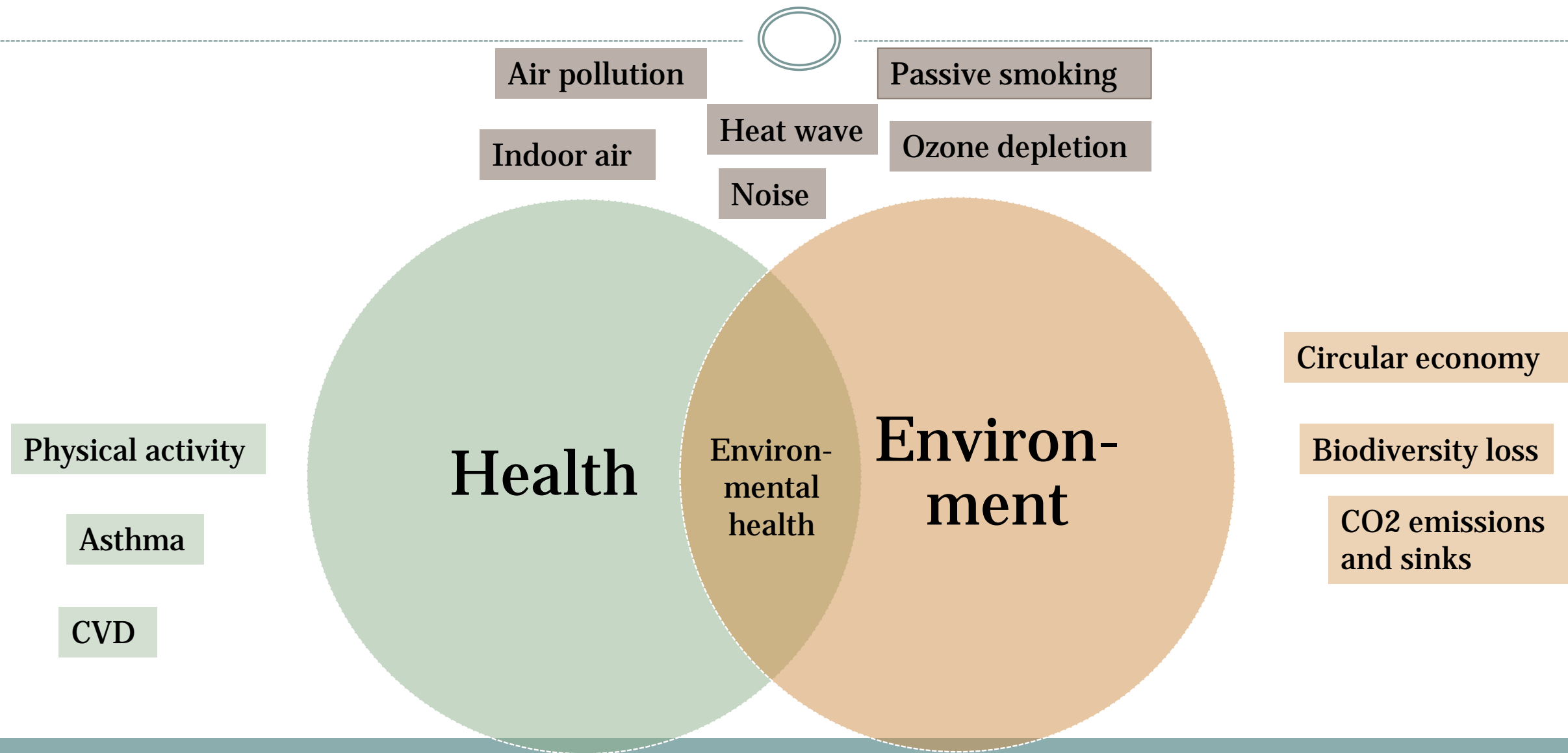
Green Deal: The Environment & Health perspective



JAANA HALONEN (THL) AND MARKO TAINIO (SYKE)



Environment, health and environmental health



Air pollution

Passive smoking

Indoor air

Heat wave

Ozone depletion

Noise

Health

Environmental health

Environment

Physical activity

Asthma

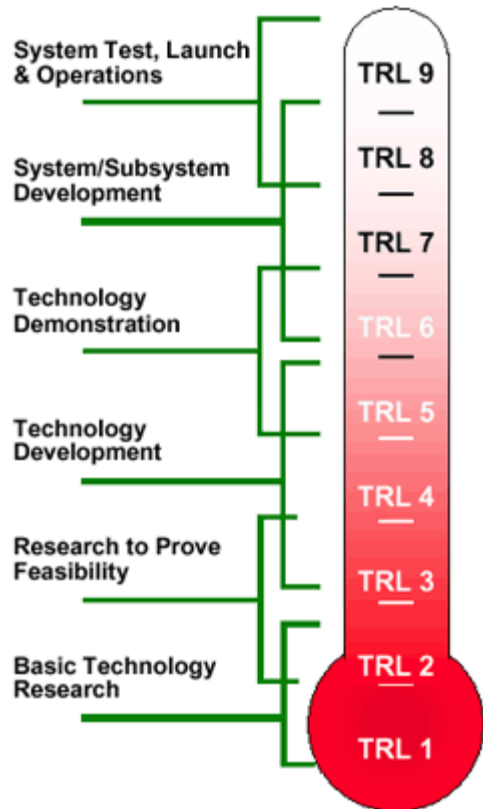
CVD

Circular economy

Biodiversity loss

CO2 emissions and sinks

Technology readiness level (TRL)



Most Areas should be in TRL 7-8 in the end of the project (start 4-6).

TRL 1 – Basic principles observed

TRL 2 – Technology concept formulated

TRL 3 – Experimental proof of concept

TRL 4 – Technology validated in lab

TRL 5 – Technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

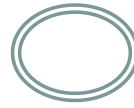
TRL 6 – Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 7 – System prototype demonstration in operational environment

TRL 8 – System complete and qualified

TRL 9 – Actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

Areas and themes for Research and Innovation Action



Area	Call	Total funding (milj €)	Funding/ project (milj €)
Area 1: Increasing Climate Ambition: Cross sectoral challenges	LC-GD-1-2-2020: Towards Climate-Neutral and Socially Innovative Cities	53	53
Area 2: Clean, affordable and secure energy	LC-GD-2-1-2020: Demonstration of innovative critical technologies to enable future large-scale deployment of offshore renewable energy technologies	18	3 to 6
Area 8: Zero-pollution, toxic free environment	LC-GD-8-1-2020: Innovative, systemic zero-pollution solutions to protect health, environment and natural resources from persistent and mobile chemicals	40	8 to 12
	LC-GD-8-2-2020: Fostering regulatory science to address combined exposures to industrial chemicals and pharmaceuticals: from science to evidence-based policies	20	4 to 6
Area 9: Strengthening our knowledge in support of the EGD	LC-GD-9-1-2020: European Research Infrastructures capacities and services to address European Green Deal challenges	28	
	<i>Support Europe leadership in clean energy storage technologies</i>		7
	<i>Enhancing European research infrastructures for greenhouse gases observation in and around cities</i>		13
	<i>Enhancing observations for air quality and citizens health in urban areas</i>		8
	LC-GD-9-2-2020: Developing end-user products and services for all stakeholders and citizens supporting climate adaptation and mitigation	25	3 to 5
Area 10: Empowering citizens for the transition towards a climate neutral, sustainable Europe	LC-GD-10-1-2020: European capacities for citizen deliberation and participation for the Green Deal	10	3 to 5
	LC-GD-10-2-2020: Behavioural, social and cultural change for the Green Deal	10	3 to 5

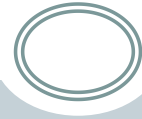
Health (66 hits in the draft document)



- **Area 1: Increasing Climate Ambition: Cross sectoral challenges**
 - LC-GD-1-1-2020: Preventing and fighting extreme wildfires with the integration and demonstration of innovative means (IA)
 - ✦ *the exposure to smoke and air pollutants from fires and **health and well-being** in local communities*
- **Area 6: Farm to Fork**
 - LC-GD-6-1-2020: Testing and demonstrating systemic innovations in support of the Farm-to-Fork Strategy (IA)
 - ✦ *Increasing the share of citizens that adhere to **healthy sustainable diets**, including among the most deprived and vulnerable groups*
- **Area 8: Zero-pollution, toxic free environment**
 - LC-GD-8-1-2020: Innovative, systemic zero-pollution solutions to protect health, environment and natural resources from persistent and mobile chemicals (RIA)
 - ✦ *Better understanding of relevance for **human and environmental health** of the problem of emerging and a persistent pollution relevance*
 - LC-GD-8-2-2020: Fostering regulatory science to address combined exposures to industrial chemicals and pharmaceuticals: from science to evidence-based policies (RIA)
 - ✦ *Develop and apply modelling, statistical approaches and other relevant methods to identify and study the **health impacts***
- **Area 9: Strengthening our knowledge in support of the EGD**
 - LC-GD-9-1-2020: European Research Infrastructures capacities and services to address European Green Deal challenges (RIA)
 - ✦ *European research infrastructures and monitoring networks for greenhouse gases observing, air quality and **citizens' health in cities***

-> **Not a health focused program!**

Environment RIAs 1/3



- **Area 1: LC-GD-1-2-2020: Towards Climate-Neutral and Socially Innovative Cities (RIA, 53 mil)**
 - One-stop shop platform for **guiding cities toward climate neutrality** – all about GHG
 - All sectors such as health promotion, water, food, energy, industry, housing, transport etc.
 - Citizen engagement, cities <50k inhabitants, 20-30 large scale pilots
- **Area 2: LC-GD-2-1-2020: Demonstration of innovative critical technologies to enable future large-scale deployment of offshore renewable energy technologies (RIA, 20-40 mil per project, ~4 projects)**
 - Offshore renewable energy innovations, including **production, grid and storage**
 - Detailed engineering plans, a complete business and implementation plan and all needed permits for the deployment of the project

Environment RIAs 2/3



- Area 8: LC-GD-8-1-2020: Innovative, systemic zero-pollution solutions to protect health, environment and natural resources from persistent and mobile chemicals (RIA, 8-12 mil per project, ~4 projects)
 - *Impact of chemicals **for the environment and health**, including e.g. modelling of environmental fate and degradation pathways*
 - *Support the aims of the new Circular Economy Action Plan*
 - *Most research oriented call?*
- Area 8: LC-GD-8-2-2020: Fostering regulatory science to address combined exposures to industrial chemicals and pharmaceuticals: from science to evidence-based policies (RIA, 4-6 mil per project, ~4 projects)
 - *Develop and apply **modelling, statistical approaches and other relevant methods** to identify and study the health impacts on human populations*
 - *Support the implementation of existing **risk assessment and risk management** approaches to reduce the most critical exposures, including the setting of limit values.*

Environment RIAs 3/3



- Area 9: LC-GD-9-1-2020: European Research Infrastructures capacities and services to address European Green Deal challenges (7-13 mil per project, ~3 projects)
 - *Energy storage*
 - *Scientific and technical work to upgrade **air quality monitoring networks**, with focus on **nanoparticles** (two case cites)*
- Area 9: LC-GD-9-2-2020: Developing end-user products and services for all stakeholders and citizens supporting climate adaptation and mitigation (3-5 mil per project, ~5 projects)
 - *How to provide climate information: How the climate is changing **at a scale meeting the user's needs***
- Area 10: LC-GD-10-1-2020: European capacities for citizen deliberation and participation for the Green Deal (3-5 mil per project, ~3 projects)
 - *Feeling of **ownership and engagement** through **citizen deliberation and participation** across Europe;*
- Area 10: LC-GD-10-2-2020: Behavioural, social and cultural change for the Green Deal (3-5 mil per project, ~3 projects)
 - *New strategies to induce **behaviour change and long-term commitment, trust and buy-in from people, communities and organisations***

Environmental Health



- Area 1: LC-GD-1-1-2020: Preventing and fighting extreme wildfires with the integration and demonstration of innovative means (IA)
 - *Improve the understanding of the **link between the exposure to smoke and air pollutants from fires and health and well-being** in local communities and first responders*
- Area 4: LC-GD-4-1-2020: Building and renovating in an energy and resource efficient way (IA)
 - ***Improved final indoor environment quality** by at least 30 % and reduction of dust and noise during retrofitting by at least 30%, leading to higher rate of users' satisfaction*
- Area 5: LC-GD-5-1-2020: Green airports and ports as multimodal hubs for sustainable and smart mobility (IA)
 - ***Air quality** (indoor, outdoor, including decontamination from microbiological pathogens) and **noise** trade-off*