Rijksinstituut voor Volksgezondheid
en Milieu
*Ministerie van Volksgezondheid,
Welzijn en Sport*

Environment and Health

RIVM | National Institute for Public Health and the Environment, the Netherlands

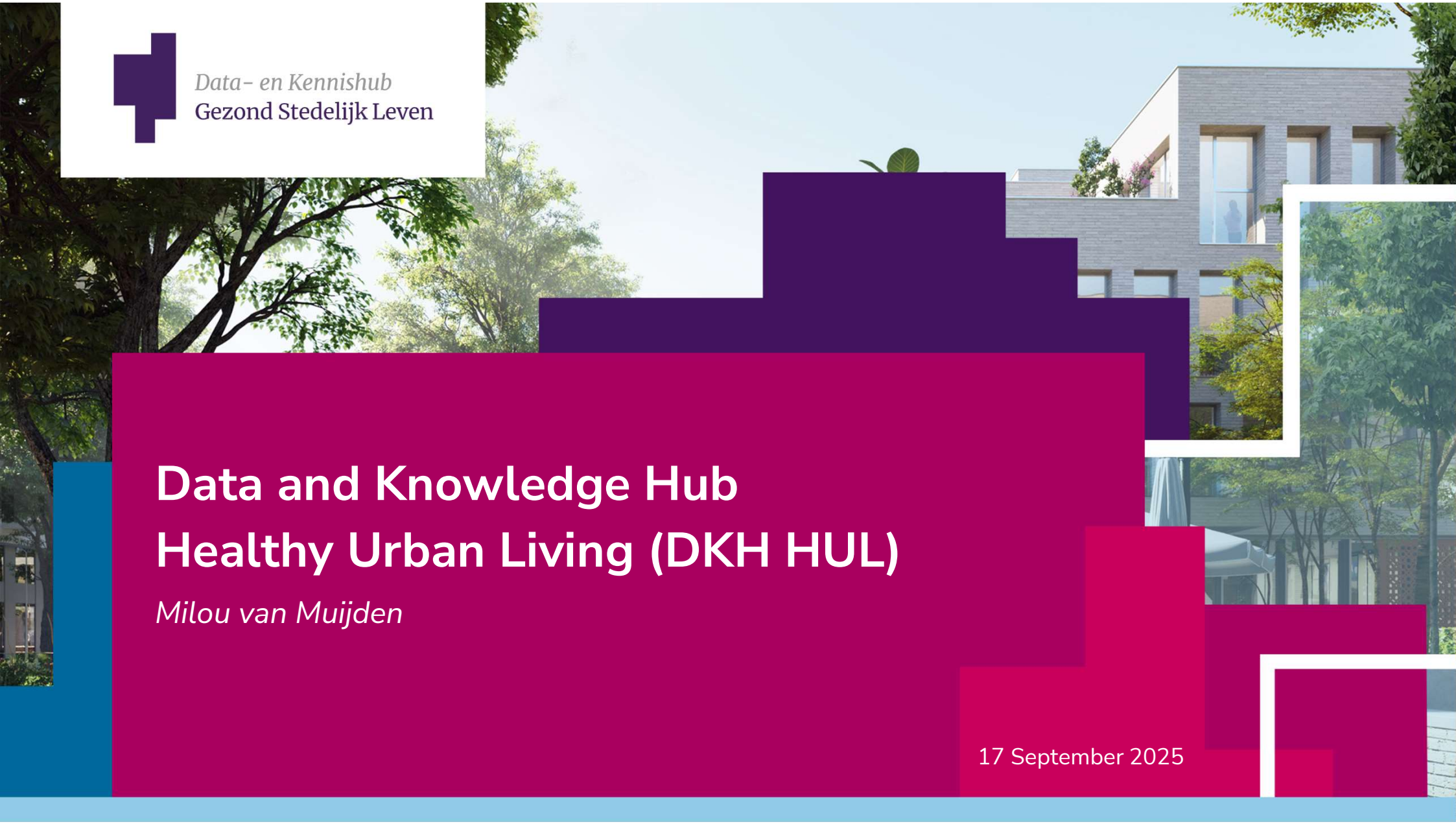
Milou van Muijden

Environment and safety

- Safe and sustainable approach to chemical substances, materials, products and new technologies
- Effects of climate change and climate change policy on environment and health
- Effects of the living environment on human health
- Emissions/exposures pollutants, greenhouse gases, noise
- Water quality in relation to health and the environment
- Ecosystem health
- Sustainable development
- Preparedness and response to incidents; occupational safety; biosecurity

Some environment and health activities

- Monitoring & modelling: emissions, air quality, noise, chemicals
- Risk or health impact assessments
- Epidemiological research:
  - COVID and air pollution
  - Pesticides
  - PFAS
- Programme Healthy Living Environment
- Sustainable health care
- Information services: Atlas Living Environment
- Support local health services
- Analysis and input for policy making (e.g. spatial planning)
- International collaborations (e.g. WHO)



Data- en Kennishub
Gezond Stedelijk Leven

Data and Knowledge Hub Healthy Urban Living (DKH HUL)

Milou van Muijden

17 September 2025

Multiple Helix Approach

Data- en Kennishub
Gezond Stedelijk Leven

UMC Utrecht
UNIVERSITY OF APPLIED SCIENCES UTRECHT
PROVINCIE UTRECHT
Rijksinstituut voor Volksgezondheid en Milieu
Ministerie van Volksgezondheid, Welzijn en Sport
FUTURE CITY
Official FIWARE iHub
foundation
URBAN SYNC
Amersfoort
ROM Utrecht Region
Gemeente Utrecht
heijmans
Utrecht University

Rijksinstituut voor Volksgezondheid
en Milieu
Ministerie van Volksgezondheid,
Welzijn en Sport

Programme Healthy Living Environment

RIVM & ZONMW

Ministry of Health, Welfare and Sports

Aim

- Better use of knowledge about a healthy living environment in the implementation of policy at municipal level
- In collaboration with municipal health services
- Stimulate collaboration physical/spatial and social domain

Programme Healthy Living Environ

Connect, & strengthen

Intersectoral collaboration:
physical and social domain

Health in spatial planning

-> concrete (HIA) tools and guidelines (if no limit values)

Same language and knowledge applicable in practice

-> database with tools and examples of measures

Working towards a Healthy Living Environment using Social Cost-Benefit Analyses

Based on RIVM report (2024)

A healthy living environment

- A healthy living environment is essential for public health and overall well-being.
- A healthy living environment is a place to live, work, and relax that:
  - Is perceived by people as attractive and pleasant,
  - Encourages and facilitates healthy behavior (health promotion),
  - Protects people from factors that may endanger their health (health protection).
  - More and more, health impacts are being considered in spatial planning and policy decisions.
- Social Cost-Benefit Analyses (SCBAs) are important tools that help policymakers weigh the consequences of their decisions for society as a whole.

Overview of Assessment Methods

Method	When to Use
Social Cost-Benefit Analysis (SCBA)	When almost all expected costs and benefits can be quantified and monetized, and a financial-based decision is desired.
Cost-Effectiveness Analysis (CEA) (based on societal costs)	When there is a clear health objective (for example, reducing diabetes in a neighborhood).
Key Figures Cost-Benefit Analysis (KBA)	Used for indicative SCBAs when there is insufficient scientific evidence or valuations, but some action is still desired.
Multi-Criteria Analysis (MCA)	When monetization is not necessary, but various types of effects need to be considered.
Impact Assessment (IA)	When an early-stage overview of potential effects is needed in the decision-making process.
Participatory Value Evaluation (PVE)	When the perspective of residents is important to include in the decision
Ex-post Evaluation	When the policy has already been implemented, to evaluate the chosen policy option.

What is an SCBA?

- A Social Cost-Benefit Analysis (SCBA) is a structured method for mapping out all societal costs and benefits of a policy, project, or intervention.
- It considers financial, health, environmental, and social effects.
- SCBAs help policymakers understand the broader impact of their choices, beyond just financial returns.

Why use SCBAs for healthy living environment

- Weigh the pros and cons of different interventions aimed at improving health and quality of life.
- Support transparent, evidence-based decisions.
- Foster collaboration across sectors, such as health, urban planning, and environment.

Examples

Urban Green Spaces:

- Benefits: Cleaner air, more opportunities for physical activity, improved mental well-being.
- Costs: Investment in landscaping and maintenance.

Traffic Measures:

- Benefits: Less air pollution and noise, improved road safety.
- Costs: Changes to infrastructure, possible impact on traffic flow.

Housing Improvements:

- Benefits: Better insulation leads to healthier indoor environments and lower energy bills.
- Costs: Renovation expenses.

Key findings

- SCBAs are valuable tools but can be complex to carry out.
- Reliable data and cooperation between experts from different fields are necessary.
- Not all effects, especially health impacts, are easy to quantify in monetary terms.
- Involving stakeholders early in the process improves the quality and acceptance of the analysis.

Recommendations

- Integrate SCBAs from the beginning of the policy or project cycle.
- Invest in knowledge sharing and building expertise among professionals.
- Develop clear guidelines for assessing health impacts within SCBAs.

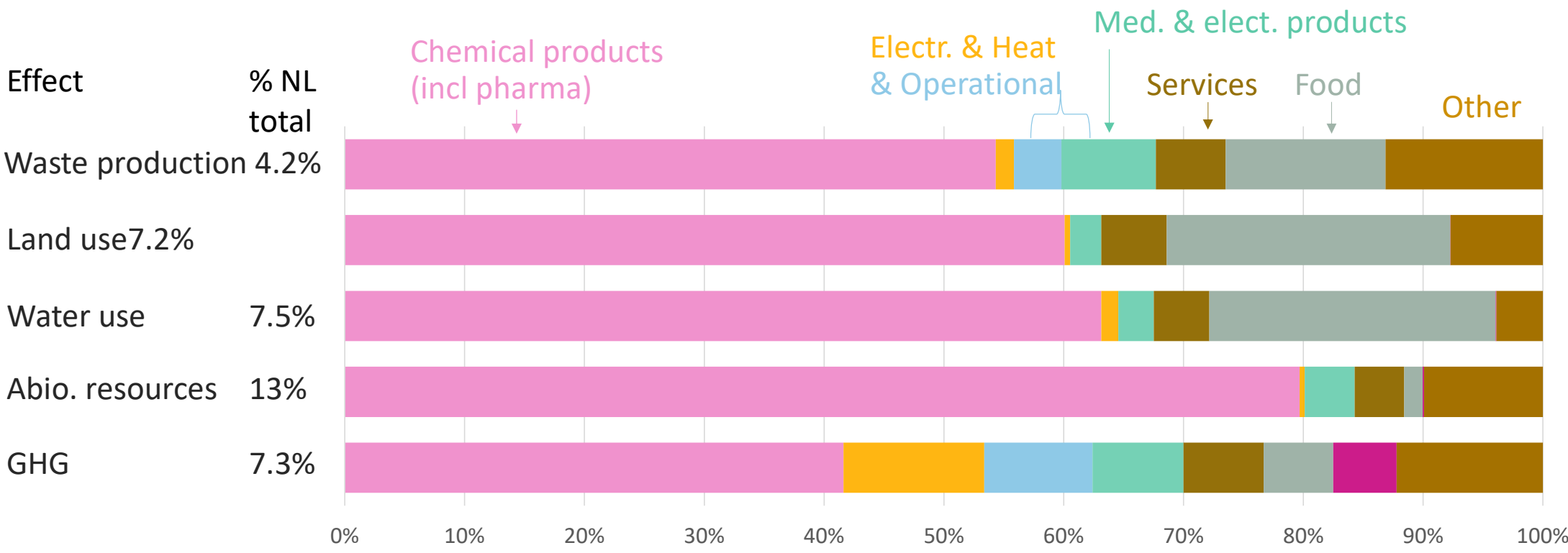
Conclusions

- Social Cost-Benefit Analyses can make an important contribution to healthier living environments.
- They help balance health, economic, and social considerations.
- Continuous development and collaboration are essential for effective use of SCBAs in policy and planning.

Get in touch

milou.van.muijden@rivm.nl

Environmental footprint Dutch health care sector



References: Steenmeijer et al. 2022, The environmental impact of the Dutch health-care sector beyond climate change: an input–output analysis, Lancet Planetary Health, 6: e949–57
& The impact of Dutch healthcare on the environment. Environmental footprint method, and examples for a health-promoting healthcare environment, RIVM rapport 2022-0159