



Women in Europe for a Common Future

“A Healthy Population at the Heart of the EU Economic Strategy”

Discussion Paper

The Environmental Burden of Disease and the EU Lisbon Agenda

WECF believes a healthy environment is a prerequisite for the healthy development of every human being, and that a healthy society is a productive one. As such, diminishing the environmental burden of disease presents a win-win-win situation, benefiting the environment, society, and the economy.

Environmental pollution damages our health

There is a clear connection between environmental pollution and many negative health effects, also known as the environmental burden of disease (EBD), a concept addressed by the EU Commission's Environmental Health Strategy (SCALE) in 2003. The environmental burden refers to air, water, and noise pollution, but also climate change and chemical contamination, to name a few. Increases over the last few years in allergies, asthma, cancers, neurodevelopmental disorders, and even cardiovascular disease, amongst others have been linked to exposure to environmental pollutants.

According to a growing group of scientists the size and strength of the environment-health link has been underestimated. This stems, in part, from research based on the conventional, and often uni-causal approach to risk assessment. However, as noted by the European Environment Agency (EEA), amongst others, a multi-causal approach is needed to deal with the complexities involved in estimating the EBD. The timing of exposure, its duration, and the doses received by target tissues have impacts that cannot simply be extrapolated from high dose effects. We must also account for the effects of combined exposures, especially in the case of chemicals (the so called “cocktail” effect—combinations of numerous chemicals and their breakdown products) and exposure from multiple sources in our environment (e.g. air, water, food). Incorporating all these elements fully in research is still quite complex, but if we look at developments in Europe we find disturbing trends:

- Asthma and allergies drastically increased over the past 15-20 years; 1 child in 7 suffers from it.¹
- Cancer incidence in children is increasing at 1% yearly; it is a second cause of mortality.²
- Breast cancer incidence is increasing at 1-2% yearly with growing evidence that some of this is caused by exposure to environmental pollutants.³
- Every citizen has man-made chemicals in his/her body.⁴
- Womb and breast milk are chemically contaminated (pollutants pass through the placental barrier).⁵
- Male fertility has sharply declined in Western countries over the past 50 years; 1 in every 6 boys born in Europe today will have a low sperm count, and research shows links with prenatal exposure to endocrine disrupting substances.⁶

The EBD brings high societal costs and the loss of tens of thousands of healthy life years. This undermines EU aims to become the most progressive, competitive, knowledge-based economy in the world by 2010, a goal also known as the **Lisbon Agenda**.

Our health affects the economy

Good public health was previously seen as a mere by-product of economic development, but a 2001 World Health Organization (WHO) report changed this view— health is actually one its key determinants.⁷ A report of the EU Commission’s Health and Consumer Protection Directorate (DG SANCO), *The Contribution of Health to the Economy in the European Union*, confirms that health affects a number of economic outcomes, including wages, labour supply (also of those giving care to ill household members), hours worked, and the time of retirement.

Europe faces two landmark demographic challenges: a declining fertility rate and an ageing population. As a response, the EU Commission *Integrated Guidelines for Growth and Jobs* makes attracting and retaining more people in the workforce a necessity.⁸ Here, the Commission encourages the “extension of working lives against a background of increased life expectancy.”⁹ Increased life expectancy and healthy life years are not feasible without serious attention to, and investment in public health. However, the priority for investment in human capital is limited to education and skills.

Both the WHO and DG SANCO concluded that investments in health lead to gains in economic productivity as well as savings in healthcare costs and healthy life years lost,¹⁰ both critical elements for achieving Lisbon objectives.

¹ EEA/WHO Regional Office for Europe. Tamburlini, G. et al, (2002). “Children’s health and environment: a review of evidence.” pp. :44–47

² International Association for Cancer Research (IARC)- Steliarova-Foucher, et al (2004), *The Lancet* 364.

³ European Parliament report (2002) (2002/2279(INI))

⁴ EEA/JRC Report (2005), “Environment and health” no. 10/2005.

⁵ Noreen, K., Mieronyte, D. (1998) “Contaminants in Swedish human milk, organohalogen compounds”, see also WWF (1999), “Chemical trespass: A toxic legacy.”

⁶ Carlsen E., et al (1992), *British Medical Journal* 305. See also van Waeleghem, K., et al (1996), *Human Reproduction* 112.

⁷ Commission on Macroeconomics and Health (2001), “Macroeconomics and health: Investing in health for economic development”

⁸ EU Commission Communication to the Spring European Council (2005), “Working together for growth and jobs: Integrated guidelines for growth and jobs (2005-2008)”

⁹ *ibid.* pg. 12

¹⁰ WHO Bulletin. Belli, et al (2005), “Investing in children’s health: what are the economic benefits?”

Opportunities for a Win-Win-Win: WECF Recommendations

Women in Europe for a Common Future believes the Lisbon Agenda can be the driver for a competitive European economy. However, it cannot achieve this while neglecting environmental and social aspects of economic activity. Recognizing the EBD and its related effects on competitiveness are urgently needed if the European Commission and Member States want to ensure the Lisbon strategy delivers what it promises.

The recommendations outlined below need to be incorporated into the **Community Lisbon Report** to be adopted by the Commission in 2007, and the 2008 revision of the **Integrated Guidelines for Growth and Jobs**, which supports Member States in developing plans for achieving the Lisbon objectives (**National Reform Programmes (NRPs)**). Member States are also encouraged to incorporate our recommendations into related National policies, and the Commission can further use the recommendations for the review of the **Environment and Health Action Plan 2004-2010**, and midterm review of the **6th Environmental Action Plan (6th EAP)**.

1. Shifting the risk assessment paradigm

To assess the EBD we must go beyond the conventional, quantitative factors associated with risk assessment, towards a more qualitative, multi-causal approach, as supported by the **SCALE** strategy.¹¹ This includes accounting for the timing, duration, and dose-amount of exposures, as well as the “cocktail” effect, and multiple sources of exposures. But research in this field is complicated, particularly considering the amount of pollutants in the environment. Further research into the effects of combinations of exposures from combined sources must be stimulated and supported with strong budgets integrated into the **NRPs**.

With a better understanding of the EBD, the real economic impacts become apparent. Direct costs like healthcare must be assessed, but also indirect ones like loss of productivity (due to morbidity or mortality, and also of household members who usually change their labour habits in response to an ill family member), adjustments needed in society (e.g. infrastructure, education), loss of quality of life, loss of healthy life years, etc. The WHO already estimated the EU could save about 161 billion Euros yearly if they could reduce air-pollution deaths.¹² The full extent of environment-related health effects must be considered by policymakers when designing policies.

Although SCALE calls for establishing a solid research base, the existing results of the past decennia are significant and cannot be ignored, especially concerning effects on (unborn) children. The **Treaty establishing a Constitution for Europe (Treaty)**, adopted by all 25 Heads of State, requires that a high level of human health protection be ensured in the definition and implementation of all Community policies and actions.¹³ It also demands that the precautionary principle be applied in all Community policy on the environment; how much more then for the health of European citizens?

- **The multi-causality of the environment-health link needs to be recognized by the EU and further investigated.**
- **Based on the precautionary principle political action needs to be taken by the EU to reduce and eliminate harmful environmental exposures; the burden of proof cannot be set so high that it prevents action.**

¹¹ EU Commission Press Release (2003), “A European Environment and Health Strategy” (Memo/03/130)

¹² WHO Press Release (2005), EURO/08/05

¹³ Treaty establishing a Constitution for Europe (2004), Article III-278

2. Health in all policies—at Community and National level

Only a healthy population is a productive one, and unfortunately the threat to human health from environmental pollution has been left behind in the Lisbon Agenda. This is contradictory to the **Treaty**, which makes the health of citizens a priority, and the **6th EAP**, which aims to contribute to a high quality of life and social well being by providing an environment where pollution levels do not give rise to harmful effects on human health or the environment. This means that environmental health aspects must be taken into account when developing policy. Environmental policies in development including REACH, the thematic strategy on sustainable use of pesticides, the directive on priority hazardous substances in water, and climate and energy policies, amongst others, must eliminate pollution at the source. This can be achieved through eco-efficiency and clean production policies, e.g. the substitution of hazardous substances and setting ambitious, time-bound reduction targets. Such policies provide solutions to addressing environment-related negative health impacts, but must be effective and action-oriented. In addition, the EU must be prepared to go beyond REACH and other policies, to design measures to protect the health of (unborn) children.(see Section 3).

Inline with the precautionary principle, decision makers need to get into political action. This means that new environmental and health legislation, e.g. for chemicals and air pollution, must take the precautionary approach. Policy interventions should have a multi-sectoral and synergistic approach, originating from the environment and health sector, but also spanning the energy, transport, industry, agriculture, planning, education and even finance sectors. The Finnish EU Presidency approach to “health in all policies” is a step in the right direction and Member States need to support and follow this initiative. In addition, new and existing policies that eliminate or reduce the risk of exposure of society to environmental pollution should be implemented coherently and consistently throughout Member States.

- **The European Commission, Member States, and Members of the European Parliament need to acknowledge that the reduction and prevention of environment-related health effects is a prerequisite for effective economic policy and sustainable development.**
- **EU policies must be synergistic and multi-sectoral in approach to reduce the EBD.**

3. Children, the foundation of a knowledge society

Because children are especially vulnerable to environmental factors there is need for policy intervention aimed specifically at reducing their exposure. Per unit of body weight children are more heavily exposed to environmental hazards—they drink more water, eat more food, breathe more air, and absorb more toxins than adults.¹⁴ They are open to longer term risks because of early exposure, including foetal exposure, that may lead to chronic diseases which can take decades to appear. New research shows that foetal and early childhood exposure to industrial chemicals in the environment can damage the developing brain and lead to neuro-developmental disorders like autism, learning and attention deficit disorder, and mental retardation.¹⁵ There has been an increase in such diseases and 1 in every 6 children has brain disorders.¹⁶ The increase in asthma, allergies, and cancers in children is also alarming. The **Community Lisbon Programme** indicates knowledge as a critical factor by which Europe can preserve its international competitive advantage, however, research shows that this very resource, secured in the brains of our children, may be under serious threat.

DG SANCO asserted that good childhood health enhances cognitive functions and reduces school absenteeism and early drop out rates.¹⁷ Thus, children with better health can be expected to attain higher education levels and therefore be more productive in the future.¹⁸ Tackling early school drop out and investing in education are clearly identified in **Guideline 23**, *Expand and improve investment in*

¹⁴ HEAL (formerly EEN) Policy Paper (2004), “Children’s special health vulnerability to environmental hazards and REACH.”

¹⁵ Grandjean, P., Landrigan PJ. (2006), “Developmental neurotoxicity of industrial chemicals” *The Lancet* (368)

¹⁶ *ibid*

¹⁷ European Commission DG Health and Consumer Protection (2005). “The contribution of health to the economy in the European Union,” pg. 12.

¹⁸ *ibid*

human capital,¹⁹ but there is insufficient attention to health. According to the WHO, investments in health, especially for children, can give even better long term financial returns than investments in education.²⁰ In addition, investing in environmental protection to minimize related health impacts can help ensure real success of this guideline.

Guideline 18 discusses promoting a life-cycle approach to work,²¹ and expresses the need to increase the employment rates of youth, women, and the ageing. These are all health-vulnerable groups, but the focus is on quality of jobs and access to lifelong learning. Sufficient attention to health is lacking.

- **Urgent action by the EU is needed to protect the health of children, especially in the prenatal phase.**
- **Investments in education are not enough to meet the Lisbon objectives; investments in protecting the health of children, and other vulnerable groups, are needed and will maximize the value of investments in education.**

4. Modern regulation and eco-innovation to boost health and competitiveness

We applaud **Guideline 11**, *encourage the sustainable use of resources and strengthen the synergies between environmental protection and growth*, but are discouraged that only few Members States have incorporated this into their **NRPs**.²² This must be incorporated to stimulate innovation, competitiveness, and to boost synergies between the economy, environment, and human health for the benefit of all. To reduce the EBD and its resulting effects on Europe's competitiveness, improved regulation which stimulates eco-innovations targeting or including environmental health aspects (e.g. clean production policies), can have tremendous, multi-faceted benefits for the environment and subsequently human health.

The results of the 2005 Prague summit of EU Environmental Protection Agencies revealed that "modern regulation" can actually reduce costs for industry and business. Modern regulation involves a mix of policy tools, including market-based measures such as emissions trading, a risk-based approach, and effective engagement and dialogue with business and other stakeholders. It can also help create markets for goods and services,²³ and promotes innovation, a key driver for competitiveness (an estimated 1 million new jobs can be created from eco-innovation²⁴). In the UK alone waste minimisation and energy efficiency could yield 7.1 Billion Euros.²⁵ Because the **Community Lisbon Programme** calls for the improvement and simplification of business regulatory frameworks,²⁶ we urge the Commission to opt for "modern," rather than less regulation, and integrate environmental health targets herein. Without due attention to environmental health aspects, products and processes in eco-innovation can still be harmful to health.

- **Embrace modern regulation in favour of environmental protection and include environmental health as an essential aspect and target in eco-innovation.**
- **Use eco-innovation to boost competitiveness and help improve our environment and subsequently our health.**
- **Earmark investments in R&D for eco-technologies geared towards eliminating toxic substances and other factors linked to the EBD.**

¹⁹ idem 8

²⁰ idem 10, see also 17

²¹ ibid

²² According to EEB analysis (2006).

²³ ibid

²⁴ Commission Staff working document (2005), "Annex to the communication from the Commission to the Council and the European Parliament- Common actions for growth and employment: The Community Lisbon programme." (SEC(2005) 981).

²⁵ Network of Heads of European Environment Protection Agencies (2005) "The contribution of good environmental regulation to competitiveness."

²⁶ Communication from the Commission to the Council and the European Parliament (2005), "Common actions for growth and employment: the Community Lisbon programme" [SEC (2005) 981].

5. Citizens concerns the heart of Lisbon

A Eurobarometer on the Lisbon Agenda revealed that Europeans give priority to protecting the environment over economic competitiveness.²⁷ They also indicated that the environment is a driving force for innovation, and environmental protection policies are incentives to innovate rather than obstacles to economic performance.²⁸ However, proponents of the renewed Lisbon Strategy claim that securing the economy is a necessary precondition for fulfilling our wider social and environmental ambitions. Because growth has not yet been decoupled from environmental degradation, and given the increasing evidence of the impact our environment has on human health, we cannot accept this position.

European citizens are worried about high unemployment levels and are concerned about their health and quality of life. The majority feel this is influenced equally by economic and social factors, as well as the state of the environment.²⁹ The combined effects of industrial chemicals, pesticides, food contaminants, air pollution, noise pollution, and climate change are, in concert, exerting a considerable burden of disease on the European population, and urgent action is needed to reduce the EBD and to protect the health of citizens. Based on European citizen's opinion, the bold political action needed to reduce the EBD would be a welcomed endeavour.

"If Europe is to compete in the global knowledge society, it must also invest more in it's most precious asset—its people."³⁰

- **Listen to the concerns and ideas of the European population regarding the environment.**
- **Pursue economic competitiveness in concert with environmental sustainability and public health.**

WECF, November 2006

WECF Women in Europe for a Common Future

s a Network of 78 Organisations in 31 Western and Eastern European countries, the Caucasus and Central Asia, working on sustainable development, health and environment, and poverty reduction.

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²⁷ European Commission, Eurobarometer 215, (2005), "Lisbon"

²⁸ Idem ²⁶

²⁹ European Commission, Eurobarometer 217 (2005), "The attitude of European citizens towards the environment."

³⁰ Report from the High Level Group chaired by Wim Kok (2004), "Facing the challenge: The Lisbon strategy for growth and employment."