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REPORT ON THE EUROPEAN ENVIRONMENT AND HEALTH PROCESS (2010-2013)

Background document



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ABSTRACT

The sixty-third session of the WHO Regional Committee for Europe and the nineteenth session of the UNECE Committee on Environmental Policy (CEP) represent the first opportunity to report back to the governing bodies on progress in implementing the commitments of the Member States, made at the Fifth Ministerial Conference on Environment and Health (Parma, Italy, 10–12 March 2010), and of resolution EUR/RC60/R7 on the future of the European Environment and Health Process (EHP).

This background document is a full report documenting the implementation of the EHP since 2010. It was adopted by the European Environment and Health Ministerial Board (EHMB) at its fourth session, held in Belgrade, Serbia, on 19 April 2013, and reflects inputs and contributions received by the EHMB from Member States and stakeholders represented in the European Environment and Health Task Force (EHTF).

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Introduction

1. The sixty-third session of the WHO Regional Committee for Europe and the nineteenth session of the United Nations Economic Commission for Europe Committee on Environmental Policy (UNECE/CEP) are the first opportunity to report in greater detail to the WHO and UNECE governing bodies on progress in implementing the commitments of the Member States made at the Fifth Ministerial Conference on Environment and Health (Parma, Italy, 10–12 March 2010), and of resolution EUR/RC60/R7 on the future of the European Environment and Health Process (EHP).¹
2. In paragraph 11 (d) of the said resolution, the Regional Committee requests the Regional Director to continue to provide secretariat services for the EHP as set out in the Parma Declaration and, for that purpose, to provide the necessary human, financial and organizational resources and capacity.

Progress in the implementation of the European Environment and Health Process

EHP governance

3. The WHO Regional Committee and CEP established a structure to govern the European Environment and Health Process (EHP) as proposed by the Fifth Ministerial Conference in the document *The future of European Environment and Health Process (2010–2016): Institutional framework*.² In line with this document, in 2011, the European Environment and Health Task Force (EHTF) was established as the leading international intersectoral body for implementation and monitoring of the EHP, while the European Environment and Health Ministerial Board (EHMB) was established as the political face

and the driving force of international policies in the field of environment and health for implementation of the commitments made within the EHP.

4. EHP governance is embedded in the overall governance structure of WHO and UNECE. Strategic and policy decisions of the Ministerial Board and Task Force are subject to the approval of the WHO Regional Committee and CEP. The Ministerial Board advises WHO and UNECE on the strategic and political directions of EHP and priorities in environment and health in Europe, while the Task Force focuses on leading the implementation of the Parma commitments by providing platforms for sharing information, networking, intercountry collaboration, development and provision of tools for implementation and monitoring of progress in the achievement of commitments, particularly at the national level. The Task Force also provides the link between the Ministerial Board and all 53 Member States and EHP stakeholders.
5. Both EHP bodies met according to the agreed schedule. The Ministerial Board reported annually to the WHO Regional Committee and CEP on achievements and areas needing greater efforts, as well as on the activities, workplans and financial requirements of the two bodies.³ The reporting to the WHO Regional Committee and CEP in 2011 and 2012 was included in the report of the WHO Regional Director for Europe and the CEP background document, respectively.

European Environment and Health Ministerial Board (EHMB)

6. Members of the EHMB include four ministers of health (France, Malta, Serbia and Slovenia in 2011–2013), elected by the WHO Regional Committee at its sixtieth session, and four ministers of environment (Azerbaijan, Belarus, Romania and Turkey in 2011–2012 and

1 Document EUR/RC60/R7 (http://www.euro.who.int/__data/assets/pdf_file/0011/122231/RC60_eRes7.pdf, accessed 18 July 2013).

2 Document EUR/55934/7 (<http://www.euro.who.int/en/what-we-do/event/fifth-ministerial-conference-on-environment-and-health/documentation>, accessed 18 July 2013).

3 Paragraphs 8 and 9 of resolution EUR/RC60/R7.

Belgium, Israel, Republic of Moldova and Ukraine in 2013–2014), elected by CEP. In addition, the WHO Regional Director for Europe, the Executive Secretary of the United Nations Economic Commission for Europe (UNECE), the Director of the United Nations Environment Programme (UNEP) Regional Office for Europe and the European Commission are also members of the EHMB. The two Co-Chairs of the EHTF are ex-officio members of EHMB. In addition, Germany and the European Environment and Health Youth Coalition (EEHYC) participate in EHMB meetings as observers.

European Environment and Health Task Force (EHTF)

7. Member States and other stakeholders were first invited to nominate national focal points for EHP in early 2011, and the process concluded in September 2011. EHTF members do not have a time-limited mandate, being appointed or changed whenever the Member State or designated stakeholder so decides.
8. As of May 2013, the Task Force has a total of over 80 focal points, nominated by all 53 Member States of the WHO European Region and all designated stakeholders.

WHO Regional Office for Europe as Secretariat of the European Environment and Health Process

9. As requested by the Regional Committee,⁴ the Regional Director took measures to strengthen the role of the WHO Regional Office for Europe as the Secretariat of the EHP, to ensure necessary and sustainable human, financial, organizational and technical resources and capacity. In view of the prevailing circumstances, and particularly considering the closure of the Rome office at the end of 2011, this has been achieved through consolidation of environment and health programmes and the expansion of the WHO European Centre for Environment and Health (ECEH) in Bonn, Germany.
10. As Secretariat to the EHP, the WHO Regional Office for Europe directed the work of its environment and health technical programmes towards supporting the

achievement of the Parma commitments. Additional Regional Office capacity was developed in the areas of chemical safety, economics of environment and health and integrated assessment and management of environmental and occupational risks and exposures.

11. Through its support for the EHMB's work, the Secretariat actively encouraged high-level political discussion at the international and regional level, advocating a comprehensive ecosystems approach to addressing issues related to environment and health.
12. In line with the request of the EHMB, and in consultation with EHP stakeholders and the international scientific community, the Secretariat developed proposals for the future priorities and directions of work of the EHP, as reported below.

Progress of work of the EHMB (2011–2013)

13. The EHMB has held four meetings thus far (2011–2013): the first was hosted by France in Paris, on 4 and 5 May 2011; the second was held in Bonn, Germany, on 14 February 2012; the third was hosted by Azerbaijan in Baku, on 16 November 2012, and the fourth was hosted by Serbia in Belgrade, on 19 April 2013.
14. At its first meeting, the EHMB agreed on its rules of procedure,⁵ which ensure that the Board's work is fully transparent and accountable to WHO Member States. Furthermore, the EHMB discussed the next steps in the European environment and health process, emphasizing the need to clarify the priorities within that process, its links to existing multilateral environmental agreements and its contribution to the sustainable development agenda. The EHMB also considered the approaches and tools that could be used to monitor and follow up the implementation of the Parma commitments, as well as the progress made towards establishing the EHTF. The report

⁴ Paragraph 11 of resolution EUR/RC60/R7.

⁵ The Rules of Procedure have been posted on the WHO Regional Office sharepoint of the Environment and Health Process and distributed to the WHO Regional Office EHP Focal Points (including representatives of both environment and health sectors) for their comments. Since the sharepoint is not in the public domain, the Rules of Procedure have also been posted on the UNECE dedicated Web page for the Committee's eighteenth session.

of the meeting is available on the WHO Regional Office website.⁶

15. The second meeting continued the discussion on the role of the EHMB and worked to identify the best ways of conducting its work so as to fulfil its mandate effectively. At the meeting, the EHMB agreed to: (a) invite the European Commission to be more involved in its work; (b) organize a consultation on environment and health priorities; (c) develop a common statement linking health to sustainable development, for the forthcoming United Nations Conference on Sustainable Development (Rio+20) (Rio de Janeiro, Brazil, 20–22 June 2012); (d) develop strategies on communication and resource mobilization; and (e) support the engagement of young people. The report of the meeting is available on the WHO Web site.
16. In addition, at its second meeting, the EHMB proposed to extend its mandate from a two-year term to a three-year term and to invite Germany as a permanent observer to the EHMB.
17. At its third meeting, the Ministerial Board discussed the determination of priorities within the European Environment and Health Process and decided to continue that work in an intersessional process. It decided to develop a European Environmental and Health Gateway in consultation with EHMB members from other United Nations organizations, and to invite the European Environment and Health Youth Coalition to participate in its meetings as an observer. The Board reviewed progress on a communication strategy and a proposed inventory of multilateral environmental agreements, and agreed that the work should continue. It further discussed governance of the EHMB and the EHTF; agreed on the proposed structure of its draft report to the WHO Regional Committee for Europe and CEP; and discussed relations with the European Commission.

18. At its fourth meeting, the Ministerial Board reviewed the strategic direction of the EHP and its priorities and key milestones in 2013–2014; adopted the final draft of the EHMB Report to the WHO Regional Committee and CEP; discussed the role that the EHMB could play to further the Parma commitments related to air pollution, within the context of the European Year of Air; reviewed forthcoming meetings under multilateral environmental agreements and policy platforms relevant to the implementation of the Parma Conference commitments, and took decisions regarding advocacy statements to be issued by the EHMB, calling upon all Member States to strengthen their commitment to the ratification and implementation of multilateral environmental agreements (MEAs) and programmes, including in particular the Convention on Long-range Transboundary Air Pollution, the Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, the Rotterdam, Stockholm and Basel Conventions,⁷ the Minamata Convention on Mercury and the Transport, Health and Environment Pan European Programme (THE PEP), in order to maximize synergies between these processes and the European Environment and Health Process.
19. At the eighteenth session of CEP in April 2012, the delegation of Romania presented progress in the work of the Ministerial Board.

Progress of work of the EHTF (2011–2013)

20. The first meeting of the EHTF was hosted by Slovenia in Bled, Slovenia on 27–28 October 2011. At the meeting, the EHTF reviewed and discussed developments since the Parma Conference and proposed areas of joint action within its scope of work. EHTF members stressed the importance of developing a strong communication strategy to strengthen the visibility and influence of the European environment and health process. They decided to strengthen their internal communication and collaboration, particularly with regard to their

⁶ *Report of the first session of the European Environment and Health Ministerial Board* (<http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/european-process-on-environment-and-health/governance/european-environment-and-health-ministerial-board-ehmb/report-of-the-first-session-of-the-european-environment-and-health-ministerial-board>, accessed 17 July 2013).

⁷ Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, revised 2011; Stockholm Convention on Persistent Organic Pollutants, 2001; Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989.

voluntary participation in the development of indicators for reporting progress towards the Parma commitments. These indicators will be used for reporting to the mid-term high-level meeting in 2014 and to the Sixth Ministerial Conference in 2016, as well as for inclusion among the targets and indicators of the new WHO European Region health policy framework, Health2020. The report of the meeting is available on the WHO Web site.⁸

21. The EHTF held its second (extraordinary) meeting on 31 May–1 June 2012, hosted by the Netherlands at The Hague, Netherlands. The meeting's purpose was to discuss a set of indicators proposed by the Secretariat to measure implementation of Member States' commitments under the Parma Declaration on Environment and Health. The Task Force achieved consensus that implementation of the Parma commitments is a higher priority, while monitoring should be considered a cost-effective means to support efficient implementation. It adopted a set of indicators, to be collected and reported on a voluntary basis, most of which rely on existing data. The report of the meeting is available on the WHO Web site.
22. The third meeting of the EHTF will be hosted by Belgium in Brussels, Belgium, on 10–11 December 2013.

Work on priorities for environment and health in the WHO European Region

23. At its first two meetings, the EHMB requested the Secretariat to work on further defining the priorities in the area of environment and health. The Ministerial Board noted the rather confused general understanding of what environment and health encompasses and what is the relative priority of specific issues, either to health and wellbeing or to environment. The Board shared the impression that there is a need to conceptualize those issues in a clear and understandable way, which would help in advocating for cross-sectoral action on environment

and health. Clarity on the relationships between environment and health and noncommunicable diseases, sustainable development, health security, energy, natural resources, human well-being and other areas of global importance is needed.

24. The need for an overarching strategic reference framework which would support the identification of priorities for the EHP in the follow-up to the Fifth Ministerial Conference on Environment and Health was also discussed at the first meeting of the EHTF, held in October 2011 in Bled, Slovenia.
25. In response to this request, and taking stock of the main international policy developments which have occurred since the Parma conference, namely the outcome of the United Nations Conference on Sustainable Development (Rio+20)⁹ and the adoption of a new WHO European Region policy, Health2020,¹⁰ at the sixty-second session of the WHO Regional Committee, the WHO Secretariat initiated a consultation process to develop a proposal for a common set of values, principles, a conceptual framework and tools to support action on priority environment and health areas.
26. The consultation process involves the environment and health scientific community, Member States and other EHP stakeholders. It aims at: (a) reviewing concepts and paradigms in this area in the context of and in relationship to other global and regional conceptual and policy frameworks including the new WHO European health policy (Health2020), sustainable development, and others as relevant; (b) providing the needed clarity on the mutual importance, relationship and relevance between environment and health; and (c) contributing to the preparations for the Sixth Ministerial Conference on Environment and Health, to be held in 2016.
27. As part of the consultation process, a first internal meeting involving relevant WHO staff took place in April 2012 in Bonn to review current and emerging

8 *First Meeting of the European Environment and Health Task Force – Meeting report* (<http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/european-process-on-environment-and-health/governance/european-environment-and-health-task-force-ehf/report-of-the-first-session-of-the-european-environment-and-health-task-force>, accessed 17 July 2013).

9 *The future we want*. Outcome document of the World Conference on Sustainable Development, 2012 (United Nations General Assembly resolution A/RES/66/288, <http://www.uncsd2012.org/thefuturewewant.html>, accessed 17 July 2013).

10 <http://www.euro.who.int/en/what-we-do/health-topics/health-policy/health-2020>, accessed 17 July 2013.

priorities in the different areas of environment and health work addressed by the WHO Regional Office, and to develop a shared understanding of issues and major developments at the global and regional level.

28. This meeting was followed by an expert consultation, which took place in Bonn, Germany on 3–4 July 2012. The consultation reviewed major emerging issues and developments that have a bearing on environment and health priorities at the regional and global level, and discussed and reached consensus on: (a) the proposed values to guide action and the definitions of key underlying concepts; (b) the analysis of the main trends, driving forces and developments that make it necessary to embrace a new, holistic, participatory, value-conscious approach, mindful of the role played by the ecological and socioeconomic contexts in support of healthy environments; (c) gaps in knowledge, methods, tools and use and interpretation of evidence that need to be addressed by the research agenda; (d) a general framework of reference to operationalize research, actions and policy developments within the broader context of global governance for environment and health.
29. On the basis of the feedback from the expert meeting, the Secretariat developed a paper on *Setting priorities for the European Environment and Health Process (EHP)*.¹¹ This is an action-oriented paper, which proposes a renewed vision and portfolio of actions to advance progress on environment and health. The proposed portfolio is based on: the analysis of the environmental burden of disease; the existence of policy commitments to address the issues; the availability of effective interventions; the interest of Member States in addressing these issues; and the added value provided by the EHP. The paper identifies specific actions that could be taken by different stakeholders of the EHP process to advance the agenda, and proposes the establishment of an Environment and Health Gateway. The Gateway would bring together the resources already available in terms of guidance, evidence, case-studies, indicators, publications, tools, training materials, communities of knowledge and practice, networks and databases

which have been produced by WHO, UNECE, UNEP, the European Environment Agency (EEA), the European Union and other intergovernmental and nongovernmental organizations, as part of their work relevant to environment and health.

30. The EHMB reviewed the paper on setting priorities at its third meeting, and provided advice for the Secretariat on the further development of the documents, which would provide an initial input to the discussions leading towards the preparation of the Sixth Ministerial Conference on Environment and Health in 2016.

Work towards implementing the commitments of the Parma Declaration

Environment and health inequalities

31. Addressing environment and health inequalities was identified in the Parma Declaration as one of the major cross-cutting priorities for work on environment and health in the WHO European Region. Following the Parma conference, intense work was carried out to compile data on environment and health inequalities in all Member States of the WHO European Region. This led to the publication of the first European environment and health inequality assessment report,¹² launched in February 2012 on the occasion of the reopening of the expanded ECEH in Bonn. Further work on environment and health inequalities has been initiated with individual Member States.

Regional Priority Goal 1. Ensuring public health by improving access to safe water and sanitation

32. The Parma Declaration identifies the Protocol on Water and Health to the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes as the regional policy platform to develop integrated policies on water resource management and health to achieve Regional Priority Goal (RPG) 1. The WHO Regional Office provides secretariat services for the Protocol, together with UNECE. As of 29 April 2013, the Protocol has 25

11 Document EHMB3–6 and annexes 1–3.

12 <http://www.euro.who.int/en/what-we-publish/abstracts/environmental-health-inequalities-in-europe.-assessment-report>, accessed 17 July 2013.

Parties.¹³ The second session of the Meeting of the Parties took place in November 2010, hosted by Romania, while preparations are underway for the third session, which will take place on 25–27 November 2013, hosted by Norway.

33. The Protocol is also acknowledged as an instrument of reference for safe water management and the protection of human health in the implementation of World Health Assembly resolution WHA64/24 on drinking-water, sanitation and health, adopted in 2011, which urges Member States, inter alia, to highlight the importance of safe drinking-water, sanitation and hygiene as the basis for primary prevention in national public health strategies and to ensure that these strategies contribute to the achievement of the water- and sanitation-related Millennium Development Goals target and to the progressive realization of the human right to water and sanitation.

34. The Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) and its Protocol on Pollutant Release and Transfer Registers are crucial to the Parma commitment to strengthen participation of the public and stakeholders in tackling environment and health issues. For example, a joint event under the auspices of the Task Force on Public Participation in Decision-making of the Aarhus Convention and the Meeting of the Parties to the Protocol on Water and Health, in cooperation with the Ministry of Environment and Forests of Romania and Women in Europe for a Common Future, focused on public participation in decision-making on water and health-related matters (applicable when setting targets; e.g. regarding drinking water quality, the reduction of water-related disease, the performance of water supply and sanitation systems, management of wastewater, the protection of water sources for drinking, bathing and aquaculture and the prevention, control and clean-up of pollution) and examined obstacles and challenges to effective public participation, as well as exploring good practices and innovative tools to

address them (e.g. a step-by-step model for public participation).

35. Working in partnership with UNECE, WHO headquarters and WHO collaborating centres, the WHO Regional Office has focused its support for Member States in their efforts to achieve RPG1 through the development and publication of technical guidance documents and the provision of assistance in the following areas.

a) Conduct of national training sessions on water safety and water-safety plans (Ukraine and Turkmenistan) and methodological training courses on the WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation in Kyrgyzstan, Republic of Moldova, Tajikistan and Uzbekistan; promotion of water safety plans (WSP) and their implementation through pilot projects in small-scale water supply systems in Tajikistan and Georgia in collaboration with the WHO Collaborating Centre for Research on Drinking-water Hygiene at the German Federal Environment Agency (UBA). Based on the experiences and lessons learnt from the pilot project in Tajikistan, a case-study booklet *Safe drinking-water for small communities: Water Safety Plans for better health* has been developed. In addition, country-level assistance on setting targets under the Protocol and implementing them was provided by UNECE in cooperation with the WHO Regional Office in Armenia, Kyrgyzstan, Republic of Moldova, Tajikistan and Ukraine. Similarly, subregional workshops on the implementation of the Protocol were conducted for eastern Europe, central Europe and Nordic and Baltic countries.

b) Publication of policy and technical guidance documents on water-related disease surveillance and small scale water supplies in addition to other guidance documents printed by UNECE jointly with the WHO Regional Office (see Annex).

c) Organization of regional meetings to strengthen capacities to improve the monitoring of water supply and sanitation and improve its cost-effectiveness through coordination and harmonization of regional and national monitoring efforts with existing information platforms, such

¹³ Serbia became the 26th State to accede to the Protocol. It will enter into force for Serbia on 15 July 2013.

as JMP, the Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) and the European Environment and Health Information System; development of an atlas on water and sanitation, in collaboration with the WHO Collaborating Centre for Health Promoting Water Management and Risk Communication of the University of Bonn, Germany. These activities also contributed to strengthening reporting under the Protocol on Water and Health, as noted by regional workshops on reporting organized by UNECE, in cooperation with the WHO Regional Office, in 2010 and 2013.

- d) Development of a project on “Equity in economic access to safe water and adequate sanitation in the European region”, which aims to assess access to water and sanitation by income group in 60 countries, in order to inform national policies and targeting of resources to reduce existing gaps and vulnerabilities in different groups of the population. This project was complemented by a UNECE-led activity on equitable access to water and sanitation, which included development and testing (in France, Portugal and Ukraine) of a self-assessment tool on equitable access and publication of best practices in the pan-European region, entitled *No one left behind*.
- e) Publication of *Guidance on water supply and sanitation in extreme weather events*, explaining how adaptation policies should consider the new risks from extreme weather events, how vulnerabilities can be identified and which management procedures can be applied to ensure sustained protection of health.
- f) Preparation of plans for targeted direct health interventions to address specific water- and sanitation-related diseases, with emphasis on surveillance of infectious diseases, in particular prevention of rotavirus (through vaccination and hygiene promotion) and helminth infections (through anthelmintic treatment combined with improved water, sanitation and hygiene), thereby strengthening collaboration and taking advantage of the synergy between the domains of environment and health and prevention of infectious and parasitic diseases.

Regional Priority Goal 2. Addressing obesity and injuries through safe environments, physical activity and healthy diet

Transport, Environment and Health Pan-European Programme (THE PEP)

- 36. The Parma Declaration stipulates the Transport, Health and Environment Pan-European Programme (THE PEP) and its Amsterdam Declaration from 2009 as one of the main regional implementation mechanisms to achieve RPG 2 through sustainable transport with a focus on active mobility. The WHO Regional Office and UNECE make up the THE PEP Secretariat. Within the framework of THE PEP, work has focused on capacity building, development and dissemination of tools and monitoring of implementation. These activities aim at reducing emissions from transport and increasing physical activity levels in the population through active mobility, and therefore contribute to RPG 2 and 3.
- 37. Capacity-building activities for national representatives from the three sectors transport, health and environment were carried out as THE PEP “relay race” (*staffete*) workshops on safe and healthy walking and cycling in urban areas (Prague-Pruhonice, Czech Republic, 2009), sustainable and healthy urban policies (Skopje, The former Yugoslav Republic of Macedonia, 2010), safe and healthy walking and cycling in urban areas (Batumi, Georgia, 2010), working together for sustainable and healthy urban transport (Kyiv, Ukraine, 2011) and sustainable development of urban transport (Moscow, Russian Federation, 2012). A sixth workshop under the *staffete* will take place in October 2013 in Almaty, Kazakhstan on green and health-friendly sustainable mobility in urban central Asia. These workshops focused on an integrated policy approach to encourage transport policy-makers and urban planners to take health and environmental impacts into consideration when making transport policy and developing transport infrastructure. They were complemented by additional international capacity-building events on the economic assessment of the health effects of walking and cycling (International Transport Forum, 2011), on the potential for green and healthy jobs in transport (Environment for Europe Ministerial Conference, 2011), Web-based training seminars specifically on the use of the WHO Regional

Office's Health Economic Assessment Tool (HEAT) for walking and cycling and THE PEP symposia on green and health-friendly investment and jobs in transport (Geneva, Switzerland, 2010), inclusive and innovative urban mobility (Geneva, Switzerland, 2011) and green and health-friendly mobility for sustainable urban life (Geneva, Switzerland, 2012). THE PEP 2013 Symposium will focus on Goal 4 of the Amsterdam Declaration, on healthy and safe modes of transport (Geneva, Switzerland, 2013). Capacities were also strengthened through the development by UNEP of an information kit on "Transport, Health and Environment: Boosting Quality of Life for Children and Youth". This publication is available in English and Russian, and the WHO Regional Office was involved in its preparation.

38. To support integrated policy-making by the transport, health and environment sectors, tools have been developed for economic assessment of the health effects of walking and cycling (HEAT for walking and cycling), the THE PEP Toolbox and Clearing House, a draft manual on developing national transport, health and environment action plans, a guidebook on working in partnership with the European Union, a case-study collection on green and health-friendly jobs in transport and a draft report on harmonization efforts in the area of signs and signals for walking and cycling.
39. Implementation of RPG 2 and the goals of the THE PEP Amsterdam Declaration have been monitored through annual surveys of the three sectors – transport, health and environment – since 2011. Country profiles and a regional overview showing major trends and developments were compiled in 2011 and 2012 for consideration by the Steering Committee of THE PEP. The reported activities at national and subnational level contribute to the achievement of RPG 2 and 3 through more sustainable transport by reducing emissions and increasing physical activity levels of the population.
40. Preparations are underway for the Fourth High-level Meeting on Transport, Health and Environment, which will be hosted by France in Paris, France on 14–16 April 2014 under the slogan: "City in Motion: People First!" to underline the importance of green and health-friendly sustainable urban policies that support active mobility.

Promotion of physical activity

41. Jointly with the European Union, the WHO Regional Office has conducted a project on networking on physical activity (PHAN). The project established several cross-sectoral networks of experts, stakeholders and practitioners for the promotion of healthy and equitable environments for physical activity in Europe, in particular for youth. These networks provide Member States with improved intelligence, guidance, tools and examples of good practices for physical activity promotion at local level. For example, improved versions and capacity building of HEAT for walking and cycling, a blueprint for making physical activity appealing to youth and principles for action on promoting physical activity in socially disadvantaged groups were developed within the framework of this project.

Child injury prevention

42. A new World Health Assembly resolution (WHA64.27) on child injury prevention, adopted in 2011, provides a renewed policy commitment which acknowledges that preventing injuries in children requires a multisectoral response in which the health sector often has a coordinating role. To increase the capacity of health systems to address injuries through multisectoral approaches, "train the trainer" courses have been held in countries including Azerbaijan, Kazakhstan, Republic of Moldova, Russian Federation, Tajikistan, Turkey and Turkmenistan. Policy dialogues to focus on preventing injuries in children specifically have been held in the Czech Republic, Estonia, Hungary, and The former Yugoslav Republic of Macedonia. As road traffic injuries are the leading cause of childhood death between 5 and 17 years, much attention has been paid to this area. The publication *European facts and Global status report on road safety 2013* focuses attention on vulnerable road users and calls for safer environments. Country profiles from 51 European States on the situation of road safety have been developed as a baseline assessment to stimulate future action as part of the United Nations Decade of Action for Road Safety (2011–2020). A global project addressing road safety in 10 countries targets excess speed and seat-belt wearing in Turkey and the Russian Federation, with notable success. Advocacy

activities took place to mark the Second United Nations Global Road Safety Week (6–12 May 2013), which focused on pedestrian safety, with special attention to children.

Regional Priority Goal 3. Preventing disease through improved outdoor and indoor air quality

Outdoor air quality

43. Urban population exposure to the air pollutants PM10 and ground-level ozone has been monitored, and reported on, through ENHIS. Specifically for PM10, data are now available for 2010 for 400 cities in 33 Member States of the WHO European Region.
44. ECEH is the Chair of the Joint Task Force on Health Aspects of Air Pollution (TFH) under the UNECE Convention on Long-range Transboundary Air Pollution. Recent work includes the development of two publications: *Health effects of black carbon and Health effects of particulate matter*, finalized and published in 2012. The latter publication provides associated policy recommendations and implications, specifically for countries in eastern Europe, the Caucasus and central Asia. Following recommendations formulated at the TFH meeting in May 2012, a review paper on residential wood biomass burning is to be completed in late 2013. The most recent meeting of TFH took place on 11–12 June 2013 in Bonn, Germany.
45. Working jointly with the European Commission, WHO is implementing the projects “Evidence on health aspects of air pollution to review EU policies – REVIHAAP” and “Health risks of air pollution in Europe – HRAPIE”. These international projects will provide the European Commission and its stakeholders with evidence-based advice on health in support of the comprehensive review of air-quality legislation in the European Union due in 2013. They provide scientific arguments for taking decisive action to improve air quality and reduce the burden of disease associated with air pollution in Europe. The material developed as part of these projects will be equally relevant to all WHO Member States in the European Region in their development and implementation of effective strategies to reduce air pollution and its significant impacts on public health.

Indoor air quality

46. Indoor air quality was addressed within the housing and health area, and WHO addressed these issues in recommendations on damp and mould risk management in indoor settings, supporting the *WHO Guidelines for Indoor Air Quality: dampness and mould*. In parallel, a report was published on the environmental health challenges of urban planning. A comprehensive risk assessment on housing and health was carried out using the environmental burden of disease approach, with the final report covering 10 housing risk factors and indicating their impact on health.
47. The WHO Regional Office is collaborating with WHO headquarters on the development of indoor air quality guidelines for household fuel combustion. The targeted publication date is September 2013. These guidelines focus on technologies and indicators which will enable a move towards air quality guidelines for individual pollutants.
48. The WHO Regional Office, within the framework of the work on monitoring the achievement of the Parma commitments through ENHIS, is developing a survey to gather information on indicators related to indoor air quality policies in schools and other relevant indoor environments. Furthermore, methodologies for monitoring of indoor air pollutants in schools have been developed. A pilot study in schools in two Member States was recently completed, and first results made available.

Regional Priority Goal 4. Preventing disease arising from chemical, biological and physical environment

Nanotechnologies

49. At the Parma Conference, the health implications of nanotechnologies and nanoparticles were listed among the key environment and health challenges that Ministers in the WHO European Region committed to act upon. Given the increasing use of nanotechnology, concerns have emerged about the potential adverse health effects of nanomaterials and nanoparticles. At present, in fact, it is not fully known which nanomaterials can be hazardous to humans and the environment, nor is it fully understood which

properties make nanomaterials more or less toxic. Although significant progress is being made in regard to studying and mapping the environmental, health and safety aspects of nanomaterials, the field is pervaded by scientific uncertainty.

50. The WHO Regional Office has been reviewing recent and current research, with a view to clarifying the connections between nanotechnology and health. The findings of this exercise suggest that a rigorous risk assessment is not feasible and that a less structured model of “risk governance” seems a more appropriate and workable way to proceed. In order to develop good models for risk governance of nanotechnologies, a two-day expert workshop was convened by WHO on 10–11 December 2012. The invited participants, possessing a wide range of expertise, were asked to present their research and work with the purpose of providing input towards the development of policy advice for WHO Member States.

Chemical safety

51. In 2012, in order to provide technical support for Member States, WHO organized a meeting on Health Aspects of Chemical Safety: Strategic Directions for Action of the WHO Regional Office for Europe. The meeting aimed to assess capacities of Member States to address health-related aspects of chemical safety, to identify gaps and set priorities for action at the regional level and to identify needs for assistance from the WHO Regional Office to facilitate implementation of Parma Declaration commitments, the Strategic Approach to International Chemicals Management (SAICM), International Health Regulations (2005), relevant World Health Assembly resolutions and other international agreements in chemical safety as well as to discuss establishment of network of experts to maximize cooperation and efficiency within the Region. The network of national focal points on health-related aspects of chemical safety was established to improve information exchange with Member States in relevant areas.

52. Other activities addressing RPG 4 in the chemical safety area were performed in order to “take advantage of the approach and provisions of relevant international agreements” and to “contribute to SAICM” implementation. The paper *Health sector*

involvement in chemicals management at national level: review of the current practice was developed to provide practical examples to address the strategy for strengthening the engagement of the health sector in the implementation of SAICM, and will be published in 2013.

53. Taking into account that countries are encouraged “to act on identified risks of exposure to ... endocrine disruptors” as well as to “call more research into potentially adverse effects of persistent, endocrine-disrupting ... chemicals” WHO is currently developing a publication on “Identification of risks and exposure to endocrine disrupting chemicals: practice of implementation at country level” to provide countries with the relevant practical information. The publication will be available from May 2013.

54. A capacity-building and awareness raising workshop to minimize and prevent the impact of toxic chemicals during different kinds of chemical incidents (acute and chronic poisonings, industrial events, deliberate releases) with specific attention to vulnerable population groups, in particular children, took place in Belgrade on 26–27 March 2013 to facilitate the Parma commitment “to protect each child from risks posed by exposure to harmful substances”. The workshop aimed to support subregional cooperation in chemical emergencies in Member States in south-eastern Europe.

55. The WHO Regional Office is recognized as a partner to the UNECE Convention on the Transboundary Effects of Industrial Accidents. It participated in an interagency meeting (Geneva, Switzerland, 29 April 2013), organized by the Secretariat of the Convention and bringing together representatives of other international organizations dealing with industrial safety. In addition, the WHO Regional Office is a co-partner with the UNECE Convention Secretariat in the development of the projects “Risk assessment of Industrial accidents and Enforcement of Cross-border Obligations (RIECO)”, of which it hosted the first working group meeting, and “European Chemical Emergency Network”.

56. Moreover, enhancing public access to information and establishment of coherent, nationwide pollutant release and transfer registers (PRTR), such as those required under the PRTR Protocol of the Aarhus

Convention is crucial for exerting downward pressure on levels of pollution and diminishing the negative impact on health. Regulating information on pollution by granting the public access to information on PRTR is also a key objective of the Protocol and activities under its auspices. Furthermore, a global International PRTR Coordinating Group recognized at its 2012 meeting the importance of the health impact of harmful chemicals.

57. As part of its support for the Parma commitment to “develop by 2015 national programmes for the elimination of asbestos-related diseases in collaboration with WHO and ILO”, the WHO Regional Office organized two workshops: “National Programmes for Elimination of Asbestos-Related Diseases: Review and Assessment” in June 2011 and “The Human and Financial Burden of Asbestos in the WHO European Region” in November 2012.

58. A new project, initiated together with WHO headquarters in 2012, will address the development of housing and health guidelines covering a wide range of aspects related to chemical, biological and physical indoor built environments.

59. As part of the response to chemical emergencies, the WHO Regional Office collaborated with Hungary in the risk assessment and follow-up of a chemical accident that occurred at an aluminium plant in October 2010.

Noise

60. In 2011, WHO published a report entitled *Burden of disease from environmental noise. Quantification of healthy life years lost in Europe*. This publication estimated that at least 1 million healthy life-years are lost annually from traffic-related noise in the cities of Western Europe, indicating that the magnitude of disease burden from noise is only second to that of outdoor air pollution among major environmental pollutants. The publication was placed in the “highly commended” category and shortlisted in the public health area for the British Medical Association Medical Book of the Year award.

61. The WHO Regional Office is currently working on updating the WHO Guidelines for Community Noise, which were last published in 1999. This

update will focus on the European Region, and will include newly emerging noise sources, such as noise from personal electronic devices and wind turbines, in response to the increasing concerns of the public about the potential health effects of these sources.

62. Furthermore, WHO has collaborated with the Joint Research Centre (JRC) of the European Commission to develop and publish in 2012 two reports on *Assessment of needs for capacity-building for health risk assessment of environmental noise: case studies* and *Methodological guidance for estimating the burden of disease from environmental noise*, respectively.

Consideration of health in strategic environmental assessment

63. The purpose of strategic environmental assessment (SEA) is to ensure that environmental considerations, including health considerations, inform and are integrated into strategic decision-making in support of environmentally sound and sustainable development. Besides providing for a high level of environmental protection, SEA is intended to increase the efficiency of decision-making, facilitate the identification of new opportunities for development, strengthen governance and increase the capacity to adapt to climate change.

64. The UNECE Protocol on Strategic Environmental Assessment (Protocol on SEA) to the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) states in its preamble that Parties to the Protocol commit themselves to promoting sustainable development and “acknowledge the benefits to the health and well-being of present and future generations that will follow if the need to protect and improve people’s health is taken into account as an integral part of strategic environmental assessment, and recognizing the work led by the World Health Organization in this respect...”. The Protocol, besides considering the health effects of development proposals, provides for consultation with health authorities in the preparation of plans and programmes in a wide range of sectors. In addition, the Convention sets out the obligations of Parties to assess the environmental impact, including the impact on human health, of certain

activities that are likely to cause significant adverse transboundary impact.

65. In 2011, UNECE published the *Resource manual to support application of the Protocol on Strategic Environmental Assessment*, which includes an annex on health developed in collaboration with WHO. The annex provides guidance on the consideration of human health as part of SEA, as required by the Protocol. A simplified version of the *Resource manual* was published in 2012.

Protecting health and the environment from climate change

66. At the first meeting of the EHTF in Bled, Slovenia, Member States suggested the creation of a working group on health and climate change (HIC), to assess the implementation of the climate change part of the Commitment to Act and the Regional Framework for Action. Thirty-two European Member States nominated members, as well as the United Nations Development Programme (UNDP), the World Meteorological Organization (WMO), the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC), several European agencies (EEA, European Centre for Disease Prevention and Control (ECDC)) and several directorates of the European Commission (Research and Innovation (RTD), Climate Action (DGClimate), Health and Consumers (DGSanco)). The first meeting of the HIC, on “Climate change and health: lessons learnt in the WHO European Region” was held in Bonn on 4–6 June 2012. A progress report, based on the results of a questionnaire sent to European Member States, and the follow-up discussion are being prepared by the Chairs of the HIC.

Health in climate change policies and related sustainable development initiatives

67. Regional progress in reducing greenhouse gas emissions has been slowing down, while progress on accelerating development of adaptation measures is growing. The consideration of health co-benefits, such as immediate and local reduced chronic diseases and health-care costs, in adaptation and mitigation policy developments in other sectors, is only slowly growing. Many of the national climate change policy developments were closely linked to

two global initiatives: sustainable development and energy for all.

68. Healthy people contribute to sustainable development. At the same time, policies that promote sustainability benefit human health. The WHO Regional Office worked closely with WHO headquarters, in developing the “Health in the green economy” initiative and contributed, within the United Nations Regional Coordination Mechanism, to the United Nations interagency report *From transition to transformation: sustainable and inclusive development in Europe and central Asia*. The report highlights current risks of resource depletion, inequalities and poverty, and proposes a range of economic and technical solutions. Within these developments, the WHO Regional Office is carrying out an assessment on the health effects of energy poverty,¹⁴ different sources of energy and the health benefits of improvement in energy efficiency.

69. The WHO Regional Office also contributed to the preparations and follow-up to the Rio+20 conference, as well as the post-2015 debate on the Millennium Development Goals (MDG). It convened a multistakeholder consultation on how health can be used as a measure of progress in sectors such as sustainable energy that may be the subject of future sustainable development goals and leads the global post-MDG 2015 thematic area, including support for many local case-studies in the Region. The high-level segment on the follow-up to Rio+20 and the post-2015 development agenda of the 65th session of UNECE (Geneva, Switzerland, 9–11 April 2013) highlighted the interlinkages between environmental, economic and social development and health. Climate change and urbanization were referred to as potential triggers which might increase health risks. The detrimental effects on health of the current austerity policies in some of the region’s economies were mentioned as an example of these interlinkages.

14 The International Energy Agency defines “energy poverty” as a lack of access to modern energy services. These services are defined as household access to electricity and clean cooking facilities (e.g. fuels and stoves that do not cause air pollution in houses). (See <http://www.iea.org/topics/energy-poverty/>, accessed 17 July 2013.)

70. Health aspects were integrated, where appropriate, into activities on climate change adaptation under the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention). For example, WHO and representatives of health authorities contributed to the UNECE Guidance on Water and Adaptation to Climate Change¹⁵ as well as the pilot projects and platform for exchanging experience on climate change adaptation in transboundary basins, including a workshop on this topic in 2012.

Strengthening health systems response to climate change

71. Through UNFCCC and European Commission processes, in 20 European Member States multisectoral processes to address climate change adaptation have been introduced and health adaptation strategies developed. For some European ministries of health, climate change is not a priority; therefore, preparation of health systems is still more reactive than proactive. The WHO Regional Office has assisted nine European countries since 2010 in assessing the effects of climate change on population health. A strong, systematic evidence base and use of innovative approaches were recognized as essential for adaptation to climate change and monitoring progress. Financial support was provided through several mechanisms, such as the Global Environment Facility, or the German International Climate Initiative for countries in areas particularly sensitive to climate change, like central Asia and south-east European countries. The WHO Regional Office supported 18 European countries in obtaining the evidence for heat-health action plans. However, other extreme events are threatening, and preparedness planning is required for floods, fires and cold-waves. Tools are under development.

72. The WHO Regional Office provided technical support for the following European countries and initiatives: A large seven-country initiative (7CI) – Albania, Kazakhstan, Kyrgyzstan, North of the Russian Federation, Tajikistan, The former Yugoslav Republic of Macedonia, and Uzbekistan – piloted health protection from climate change. The

initiative developed national (or subnational) health adaptation strategies or action plans, assessed the health effects of climate change, raised awareness and applied innovative intervention approaches in air-quality monitoring, extreme events risk-mapping and preparedness planning, increasing population-based health care, disaster contingency plans, water safety plans. In addition, Turkey and Uzbekistan were supported in developing national adaptation plans, early warning and awareness raising. For each extreme weather event (heat-wave, flood, cold-wave, vegetation fire) specific health protection guidance has been developed, and is supplied to European Member States every season. This includes information on early warning, as well as health system measures. In addition technical assistance was provided during major heat-wave, flooding, cold-wave and vegetation-fire events to multiple countries between 2010 and 2013.

73. An impact assessment of possible health-policy options was carried out by the WHO Regional Office for the European Commission work on developments on climate change adaptation. The adaptation package was launched in April 2013.

Greening health systems

74. Health systems can lead by example in making their operations more environmentally friendly. Currently health systems contribute 4.2% of greenhouse gas emissions. Taking action now can reduce disease and emissions. The WHO Regional Office entered into two partnerships: (1) the Informal United Nations Interagency Task Team on Sustainable Procurement in the Health Sector and (2) the partnership between the United Kingdom National Health Service (NHS) and the WHO Regional Office in developing “guidance” on environmentally sustainable health systems. Several results are available from the pilot initiatives, which provide a better understanding of the opportunities: for example, in Kyrgyzstan, five medical facilities were equipped with solar equipment to pilot self-sustainability in areas vulnerable to interruption in the continuous energy, and in The former Yugoslav Republic of Macedonia, new approaches in energy efficiency for hospitals were tested.

15 [http://www.unece.org/index.php?id=11658&L=\(\)](http://www.unece.org/index.php?id=11658&L=()), accessed 17 July 2013.

Research

75. Since 2010, there has been a better understanding at national level of the health effects of climate change, the implications of adaptation and mitigation for other sectors and how best to strengthen public health in the face of climate change. Barriers to research include lack of access to data on health and the environment and lack of data exchange. The diversity of the WHO European Region and, in particular, the integration of the eastern part of the Region in European research are important in achieving progress in research and development.
76. The WHO Regional Office contributes to major research and assessment initiatives. This includes the health effects of climate change in several European subregions under different degrees of climate change (European Union, Mediterranean, central Asia), the development of early-warning systems, the International Panel on Climate Change (IPCC) reports, the recent EEA assessment of the impact of climate change in Europe, the WMO/WHO *Atlas of health and climate*, and the impact of public health policies necessary to adapt to climate change in the European Union. Tools for tasks such as the estimation of health damage and adaptation costs of climate change have been developed.

Sharing information and the European information platform on climate change

77. A resource toolkit for training on climate change and health is under development by the WHO Regional Office in cooperation with WHO headquarters, ECDC and EEA. More emphasis is required to integrate climate change into university curriculum development and public health training. A newsletter provides information for some 1500 subscribers on climate change and health. The WHO Regional Office and European Member States organized three side events at UNFCCC conferences and presented important findings on health at the conference “A Dialogue for Climate Services Users and Providers: Towards Implementation of the Global Framework for Climate Services” organized by WMO.
78. In addition, a climate change and health information platform, advocated by the European Regional Framework for Action, is under development, and

will be integrated in the broader Environment and Health Information Gateway.

Involvement of children, young people and other stakeholders

79. In the Parma Declaration, Member States made a commitment to ensuring that youth participation is facilitated across all Member States at both national and international levels by providing young people with assistance, resources and the training required for meaningful and sustainable involvement in all aspects of the process.
80. In this context, a renewed youth network was proposed, with strong structures throughout the WHO European Region and with representation in all national delegations, as well as active engagement in all national processes for the implementation of the Parma commitments.
81. A youth meeting, convened during the first Meeting of the EHTF held in Bled, Slovenia in October 2011, called for support for a larger youth event to be convened in 2012, in fulfilment of the Parma commitment.
82. Addressing the need to strengthen the involvement of youth, the Secretariat organized a consultative meeting on 13–14 August 2012 in Bonn, Germany, for the core group of youth representatives to review the status of their involvement and further needs for fulfilling the commitments in the Parma Declaration; discuss the role and mechanisms of meaningful and sustainable youth participation in the EHP; and propose a way forward for the establishment, coordination and management of a youth coalition at national and international level.
83. The first meeting of the European Environment and Health Youth Coalition (EEHYC) took place on 16–17 October 2012 in Florence, Italy. The meeting provided an opportunity to showcase and share experiences developed by youth organizations in different European countries, with a view to promoting crossfertilization and learning from each other; launched “The Blueprint: A plan for making physical activity appealing to a youth target group” as the first product developed with the direct input of the Youth Coalition to support

the promotion of physical activity; discussed and adopted the proposed mission, terms of reference and a workplan for the EEHYC and elected an Organizing Committee of the EEHYC, whose main task will be the establishment of the Coalition as a new international nongovernmental organization. In synergy with these developments, UNEP issued a special supplement of the UNEP youth magazine entitled *Healthy people in a healthy environment*, with a focus on the Parma Declaration and what it means to young people.¹⁶ In addition, it facilitated the participation of youth representing the EEHYC at the UNEP international youth conference, held under the theme “Health and Environment” from 10–14 February 2013 in Nairobi, Kenya.¹⁷

Knowledge and tools for policy-making and implementation

84. Sound knowledge, evidence and information are key ingredients for reaching the goals of the EHP. It is important that progress towards such objectives is monitored, that state-of-the-art methods and tools are identified and made available to all the parties involved, and that technical capacities are further developed to deal with the challenges described above.

85. Two implementation guides (*The Aarhus Convention: an implementation guide*; and *Guidance on implementation of the Protocol on Pollutant Release and Transfer Registers*) help authorities to set legislative frameworks, norms and standards aimed at promoting participatory governance. In the context of environment and health, these two documents can be used as tools for participation of the public and other stakeholders in tackling environment and health issues.

86. The UNECE Strategy for Education for Sustainable Development (ESD) is a practical tool for integrating sustainable development themes into all forms of education. The Strategy identifies health as a key theme of education for sustainable development. ESD supports the reorientation of traditional

education programmes and systems in order to (a) enable educators and learners to learn to live healthily in a world with health risks; (b) ensure an effective, sustainable and institutionalized educational response to health challenges; (c) develop educational content, curricula and materials that emphasize value clarification, capacity development and skill-building to enable learners to adopt caring and supportive attitudes to others and protective and health-seeking behaviours for themselves.

87. UNECE has developed a green economy toolbox which comprises various guides, guidelines, methodologies and manuals on legal instruments, norms and standards, as well as policies and educational material to support the transition to a green economy and with it to achieve, inter alia, improved health protection, in particular by reducing environmental pollution. Numerous tools can be identified in the toolbox, offering good practice and specific measures for the greening of economic sectors such as agriculture, energy, housing, industry, transport and water and achieve the goals of improving the health of populations and the state of the environment.

European Environment and Health Information System

88. ENHIS is an important platform for the presentation of data and information on environment and health in the WHO European Region. The main objective of ENHIS is to monitor the implementation of the EHP. The new indicators of exposure, health effect and policy action which were approved at the Second (Extraordinary) Meeting of EHTF in May–June 2012 will be published in ENHIS and used for the development of a mid-term review in 2014 and a progress assessment report for the Sixth Ministerial Conference in 2016.

89. The Secretariat has been working to improve users' experience and enhance information dissemination through ENHIS; a new interactive IT platform for ENHIS has been launched (www.euro.who.int/enhis); a Russian-language interface is being completed; further plans involve presentation of subnational data in ENHIS, improving characterization of environment and health inequalities and expansion of the system to incorporate new indicators.

¹⁶ <http://tunza.mobi/wp-content/uploads/2011/10/Env-and-Health-v6-1.pdf>, accessed 17 July 2013.

¹⁷ Tunza Youth Statement (http://unep.org/tunza/conference2013/Docs/Tunza_Youth_Statement.pdf, accessed 17 July 2013).

90. The Secretariat is working with technical experts and collaborating institutions to develop data collection and analysis methodologies for new indicators of exposure and health effects, and to coordinate data collection in Member States. Priority is given to indicators relying on existing data which can be acquired from international databases or national sources. Some new exposure indicators have already been published in ENHIS. The Secretariat is collaborating with Member States on four main activities:

- a) The development of a comprehensive questionnaire survey on EH policies: information on national policies will be combined with data on exposures and/or health effects to help Member States identify priorities for new policy actions or targeted interventions.
- b) The collection of new data, necessary in some Member States to close critical data gaps and enable efficient monitoring of time-bound Parma Declaration commitments.
- c) An exposure assessment survey in schools covering indoor air pollutants, ventilation in classrooms, exposure to mould and dampness, access to proper sanitation facilities and hygiene practices, smoking in schools and mode of transportation to schools.
- d) The development of detailed protocols for a proposed new human biomonitoring survey, which will assist interested countries in closing critical data gaps and developing national capacities to conduct biomonitoring. This activity is being implemented in collaboration with the Consortium to Perform Human Biomonitoring on a European Scale (COPHES).

Shared Environment Information System

91. UNECE is contributing to the establishment of the Shared Environment Information System (SEIS) as a response to the decision of the Astana Ministerial Conference¹⁸ to improve the collection, exchange

¹⁸ The Seventh "Environment for Europe" Ministerial Conference took place in Astana (Kazakhstan) from 21 to 23 September 2011. For more information please see: <http://www.unece.org/env/efe/astana/welcome.html> (accessed 17 July 2013).

and use of environmental data and information across Europe. The UNECE Working Group on Environmental Monitoring and Assessment (WGEMA) and the Joint Task Force on Environmental Indicators (JTFEI) are helping to establish a regular process of environmental assessment and the development of SEIS in countries in eastern Europe, the Caucasus, central Asia and the Russian Federation, as well as in interested countries of south-eastern Europe jointly with EEA and other partners.

Environment and health economics

92. As Member States face increasing challenges to allocate scarce resources, the economic costs and implications of environment and health policies are a crucial issue, which is sometimes overlooked or considered simplistically.

93. The importance for the public and environmental health community to reassess current economic models and tools has clearly emerged. The ongoing economic and financial crisis confronts policy-makers with complex policy challenges, on how to overcome economic weakness, debt burden and high unemployment rates. Societies simultaneously strive to maintain health services and environmental protection, and to prevent further deepening of social and health inequalities in the short- and medium-term. In the long term, it is critical to make development more sustainable, greener, healthier and more inclusive.

94. Since late 2011, the WHO Regional Office has been working on environment and health economics in a new dedicated line of work. Following an extensive literature review, an expert meeting was held on 29–30 November 2012 in Bonn, Germany. These activities and the consultation resulted in: identifying most relevant tools and resources for sound economic analysis of environment and health action, including cost of inaction; identifying key questions and knowledge gaps, including shortcomings of traditional economic models for dealing with environment and health; drafting a comprehensive strategic framework for environment and health economics. This strategic framework is based on three main components: (a) assembling strategic partnerships; (b) involving target audiences in the process; (c) generating evidence in appropriate

format. Participants in this consultation process supported the creation of a Environment and Health Economic Network, which will represent the backbone of future work.

Strengthening capacities for environment and health

95. The strengthening of professional and institutional capacities for environment and health is an important prerequisite for Member States, if they are to keep abreast of evolving challenges. The WHO Regional Office has been promoting and conducting intense work in this domain. Capacity-building efforts have been made to cover a broad variety of topics, including thematic areas such as climate change,

industrially contaminated sites, chemical safety, etc, as well as cross-cutting topics, such as health impact assessment and risk communication. A major project, conducted between 2010 and 2012, combined many of these components in a major training workshop held in Riga, Latvia, on 19–23 March 2012, involving 70 representatives of the environment and the health sector from the eight Member States participating in the training. The project was also instrumental in developing training materials in environment and health for further use in capacity building, a strategy for the inclusion of environment and health in study curricula in Europe, and facilitating in-country activities addressing specific issues of concern, to be addressed through health impact assessment.

Annex. Relevant publications 2010–2013

Work towards implementing the commitments of the Parma Declaration

- United Nations Economic Commission for Europe. *Resource manual to support application of the Protocol on Strategic Environmental Assessment*. Geneva, 2011 (http://www.unece.org/env/eia/pubs/sea_manual.html, accessed 17 July 2013).
- United Nations Economic Commission for Europe. *Simplified resource manual to support application of the Protocol on Strategic Environmental Assessment*. Geneva, 2012 (<http://www.unece.org/index.php?id=30823>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Environmental health inequalities in Europe. Assessment report*. Copenhagen, 2012 (<http://www.euro.who.int/en/what-we-publish/abstracts/environmental-health-inequalities-in-europe.-assessment-report>, accessed 19 July 2013).
- WHO Regional Office for Europe. *Towards environmental health inequality reporting: development of a core set of indicators for reporting and assessing environmental health inequalities in the WHO European Region. Report of an expert group meeting, Bonn, Germany, 25–26 October 2010*. Copenhagen, 2011 (http://www.euro.who.int/__data/assets/pdf_file/0013/130243/e94628.pdf, accessed 17 July 2013).
- Braubach M. Benefits of environmental inequality assessments for action. *Journal of Epidemiology and Community Health*, 2013, 67:625–628 (doi:10.1136/jech-2012-201390).
- — challenges — improvements. Geneva, WHO, 2010 (http://www.unece.org/fileadmin/DAM/env/water/publications/documents/Small_scale_supplies_e.pdf, accessed 17 July 2013).
- United Nations Economic Commission for Europe/WHO Regional Office for Europe. *Guidelines on the setting of targets, evaluation of progress and reporting under the Protocol on Water and Health*. Geneva, United Nations, 2010 (http://www.unece.org/fileadmin/DAM/env/water/publications/documents/guidelines_target_setting.pdf, accessed 17 July 2013).
- United Nations Economic Commission for Europe/WHO Regional Office for Europe. *Guidance on water supply and sanitation in extreme weather events*. Copenhagen, WHO Regional Office for Europe, 2011 (http://www.unece.org/fileadmin/DAM/env/water/publications/documents/guidelines_E/WHOGuidanceFVLR.pdf, accessed 17 July 2013).
- WHO Regional Office for Europe. *Policy guidance on water-related disease surveillance*. Copenhagen, 2011 (http://www.euro.who.int/__data/assets/pdf_file/0011/149186/e95619.pdf, accessed 17 July 2013).
- WHO Regional Office for Europe. *Technical guidance on water-related disease surveillance*. Copenhagen, 2011 (http://www.euro.who.int/__data/assets/pdf_file/0009/149184/e95620.pdf, accessed 17 July 2013).
- United Nations Economic Commission for Europe. *Sustainable management of water and water-related ecosystems* (United Nations document ECE/ASTANA.CONF/2011/3). Geneva, 2011 (<http://www.unece.org/fileadmin/DAM/env/documents/2011/ece/ece.astana.conf.2011.3.e.pdf>, accessed 17 July 2013).
- United Nations Economic Commission for Europe. *Astana water action* (United Nations document ECE/

Regional Priority Goal 1. Ensuring public health by improving access to safe water and sanitation

- United Nations Economic Commission for Europe/WHO Regional Office for Europe. *Small scale water supplies in the pan-European region: background*

ASTANA.CONF/2011/5). Geneva, 2011 (<http://www.unece.org/fileadmin/DAM/env/documents/2011/ece/ece.astana.conf.2011.5.e.pdf>, accessed 17 July 2013).

- United Nations Economic Commission for Europe. *Chair's summary of the Seventh "Environment for Europe" Ministerial Conference, Astana, September 2011* (United Nations document ECE/ASTANA.CONF/2011/2/Add.2) (<http://www.unece.org/fileadmin/DAM/env/documents/2011/ece/ece.astana.conf.2011.2.add.2.e.pdf>, accessed 16 July 2013).
- United Nations Economic Commission for Europe. *No one left behind: good practices to ensure equitable access to water and sanitation in the pan-European region*. Geneva, 2012 (http://www.unece.org/fileadmin/DAM/env/water/publications/No_one_left_behind/No_one_left_behind_E.pdf, accessed 16 July 2013).
- United Nations Economic Commission for Europe/WHO Regional Office for Europe. *No one left behind: ensuring equitable access to water and sanitation*. Geneva, 2012, (http://www.unece.org/fileadmin/DAM/env/water/publications/No_one_left_behind/Exe_summary_FINAL.pdf, accessed 17 July 2013).

Regional Priority Goal 2. Addressing obesity and injuries through safe environments, physical activity and healthy diet

- WHO Regional Office for Europe. *Health economic assessment tools (HEAT) for walking and for cycling. Methodology and user guide. Economic assessment of transport infrastructure and policies*. Copenhagen, 2011 (<http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/Transport-and-health/publications/2011/health-economic-assessment-tools-heat-for-walking-and-for-cycling.-methodology-and-user-guide>, accessed 17 July 2013).
- United Nations Environment Programme. *Transport, health and environment: boosting quality of life for children and youth* (http://unep.org/roe/Portals/139/documents/Transport/Eng_Complete_lr.pdf; http://unep.org/roe/Portals/139/documents/Transport/Rus_Complete_lr.pdf, accessed 17 July 2013).

- WHO Regional Office for Europe. *Green and healthy jobs in transport: launching a new partnership under THE PEP*. Copenhagen, 2011 (<http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/Transport-and-health/publications/2011/green-and-healthy-jobs-in-transport-launching-a-new-partnership-under-the-pep>, accessed 17 July 2013).
- Christensen N, Kahlmeier S, Racioppi F. Sport promotion policies in the European Union: results of a contents analysis. *Scandinavian Journal of Medicine and Science in Sports*, 2012 (published online 3 Sep 2012, doi:10.1111/j.1600-0838.2012.01500.x).
- Olabarria M et al. Health impact of motorised trips susceptible of being substituted by walking. *European Journal of Public Health*, 2012 (doi: 10.1093/eurpub/cks015).
- WHO Regional Office for Europe. *Young and physically active: a blueprint for making physical activity appealing to youth*, 2012 (<http://www.euro.who.int/en/what-we-do/health-topics/disease-prevention/physical-activity/publications/2012/young-and-physically-active-a-blueprint-for-making-physical-activity-appealing-to-youth>, accessed 17 July 2013).
- Rutter H et al. Developing a tool for estimating the economic impact of reduced mortality due to increased cycling: the Health Economic Assessment Tool (HEAT) for cycling. *American Journal of Preventive Medicine*, 2013, 44 (1):89–92.
- WHO Regional Office for Europe. *Physical activity promotion in socially disadvantaged groups: principles for action. Policy summary*. Copenhagen, 2013 (<http://www.euro.who.int/en/what-we-do/health-topics/disease-prevention/physical-activity/publications/2013/physical-activity-promotion-in-socially-disadvantaged-groups-principles-for-action.-policy-summary>, accessed 17 July 2013).

Regional Priority Goal 3. Preventing disease through improved outdoor and indoor air quality

- WHO Regional Office for Europe. *Technical and policy recommendations to reduce health risks due to dampness and mould*. Copenhagen, 2010 (http://www.euro.who.int/__data/assets/pdf_file/0015/121425/E92998.pdf, accessed 17 July 2013).
- WHO Regional Office for Europe. *Urban planning, environment and health: from evidence to policy action*. Copenhagen, 2010 (http://www.euro.who.int/__data/assets/pdf_file/0004/114448/E93987.pdf, accessed 17 July 2013).
- WHO Regional Office for Europe. *Environmental burden of disease associated with inadequate housing*. Copenhagen, 2011 (http://www.euro.who.int/__data/assets/pdf_file/0003/142077/e95004.pdf, accessed 17 July 2013).
- Braubach M. Key challenges of housing and health from WHO perspective. *International Journal of Public Health*, 2011, 56:579–580.
- Braubach M et al. Mortality associated with exposure to carbon monoxide in WHO European Member States. *Indoor Air*, 2012, 23:115–125.
- United Nations Economic Commission for Europe. *Health effects of particulate matter* (official document ECE/EB.AIR/2012/18, submitted to the 31st session of the Executive Body for the Convention on Long-range Transboundary Air Pollution). Geneva, 2012 (http://www.unece.org/fileadmin/DAM/env/documents/2012/EB/ECE_EB_AIR_2012_18_E.pdf, accessed 26 April 2013).
- WHO Regional Office for Europe. *Health effects of black carbon*. Copenhagen, 2012 (http://www.euro.who.int/__data/assets/pdf_file/0004/162535/e96541.pdf, accessed 17 July 2013).
- Braubach M, Ferrand A. Energy efficiency, housing, equity and health. *International Journal of Public Health*, 2013 [online] (doi:10.1007/s00038-012-0441-2).

- WHO Regional Office for Europe. *Review of evidence on health aspects of air pollution – REVIHAAP. First results*. Copenhagen, 2013 (http://www.euro.who.int/__data/assets/pdf_file/0020/182432/e96762-final.pdf, accessed 17 July 2013).
- WHO Regional Office for Europe. *Review of evidence on health aspects of air pollution – REVIHAAP Project: Final technical report*. Copenhagen, 2013 (http://www.euro.who.int/__data/assets/pdf_file/0004/193108/REVIHAAP-Final-technical-report.pdf accessed 17 July 2013).

Regional Priority Goal 4. Preventing disease arising from chemical, biological and physical environment

- WHO Regional Office for Europe. *Burden of disease from environmental noise. Quantification of healthy life years lost in Europe*. Copenhagen, 2011 (<http://www.euro.who.int/en/what-we-publish/abstracts/burden-of-disease-from-environmental-noise.-quantification-of-healthy-life-years-lost-in-europe>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Assessment of needs for capacity-building for health risk assessment of environmental noise: case-studies*. Copenhagen, 2012 (<http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/noise/publications/2012/assessment-of-needs-for-capacity-building-for-health-risk-assessment-of-environmental-noise-case-studies>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Methodological guidance for estimating the burden of disease from environmental noise*. Copenhagen, 2012 (<http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/noise/publications/2012/methodological-guidance-for-estimating-the-burden-of-disease-from-environmental-noise>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Biomonitoring-based indicators of exposure to chemical pollutants. Report of a meeting (Catania, Italy, 19–20 April 2012)*. Copenhagen, 2012 (<http://www.euro.who.int/en/what-we-do/data-and-evidence/environment->

and-health-information-system-enhis/publications/meeting-reports/biomonitoring-based-indicators-of-exposure-to-chemical-pollutants.-meeting-report, accessed 17 July 2013).

- WHO Regional Office for Europe. *Contaminated sites and health: report of two WHO workshops (Syracuse, Italy, 18 November 2011; Catania, Italy, 21–22 June 2012)*. Copenhagen, 2013 (http://www.euro.who.int/__data/assets/pdf_file/0003/186240/e96843.pdf, accessed 17 July 2013).
- United Nations Environment Programme/World Health Organization. *State of the science of endocrine disrupting chemicals* (http://unep.org/pdf/9789241505031_eng.pdf, accessed 17 July 2013).
- United Nations Environment Programme. *Costs of inaction on sound management of chemicals*. Geneva, 2013 (http://unep.org/hazardoussubstances/Portals/9/Mainstreaming/CostOfInaction/Report_Cost_of_Inaction_Feb2013.pdf, accessed 17 July 2013).
- United Nations Environment Programme. *Global chemicals outlook: towards sound management of chemicals* (http://unep.org/pdf/GCO_Synthesis%20Report_CBDTIE_UNEP_September5_2012.pdf, accessed 17 July 2013).

Protecting health and the environment from climate change

- WHO Regional Office for Europe/Netherlands Environmental Assessment Agency. *Climate change and health – policy options for climate change and health: report on a joint WHO-PBL technical meeting*. Copenhagen, WHO Regional Office for Europe, 2010 (<http://www.pbl.nl/en/publications/policy-options-for-climate-change-and-health>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Climate change, extreme weather events and public health*. Copenhagen, 2010 (<http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/Climate-change/publications/2011/climate-change,-extreme-weather-events-and-public-health>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Climate change and health in Europe: opportunities for action in partnership*. Copenhagen, 2010 (<http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/Climate-change/publications/2010/climate-change-and-health-in-europe-opportunities-for-action-in-partnership>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Wild fires and the heat-wave in the Russian Federation: situation report 15 August 2010*. Copenhagen, 2010 (<http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/Climate-change/publications/2010/wildfire-situation-report-15-august-2010>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Wild fires and the heat-wave in the Russian Federation: public health advice*. Copenhagen, 2010 (<http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/Climate-change/publications/2010/wildfires-and-heat-wave-in-the-russian-federation-public-health-advice3>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Public health advice on preventing health effects of heat – new and updated information for different audiences*. Copenhagen, 2011 (<http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/Climate-change/publications/2011/public-health-advice-on-preventing-health-effects-of-heat.-new-and-updated-information-for-different-audiences>, accessed 17 July 2013).
- WHO Regional Office for Europe/Ministry of Health of the Kyrgyz Republic. *Assessment of the impact of climate change in the health of the population of the Kyrgyz Republic – final report*. Copenhagen, 2011.
- WHO Regional Office for Europe. *Protecting health from climate change: a seven countries initiative – project results and compendium of project documents in the former Yugoslav Republic of Macedonia 2008–2011*. Copenhagen, 2011.
- WHO Regional Office for Europe/Ministry of Health of the former Yugoslav Republic of Macedonia. *Climate change health adaptation strategy and action plan of the former Yugoslav Republic of Macedonia*.

- Copenhagen, 2011 (<http://www.euro.who.int/en/where-we-work/member-states/the-former-yugoslav-republic-of-macedonia/publications3/climate-change-health-adaption-strategy-and-action-plan-of-the-former-yugoslav-republic-of-macedonia>, accessed 17 July 2013).
- WHO Regional Office for Europe/Ministry of Health of the former Yugoslav Republic of Macedonia. *Climate change and communicable diseases: a manual for health workers*. Copenhagen, 2011 (<http://www.euro.who.int/en/where-we-work/member-states/the-former-yugoslav-republic-of-macedonia/publications3/climate-change-and-communicable-diseases-a-manual-for-health-workers-of-the-former-yugoslav-republic-of-macedonia>, accessed 17 July 2013).
 - WHO Regional Office for Europe/Ministry of Health of the former Yugoslav Republic of Macedonia. *Heat-health action plan to prevent the heat wave consequences on the health of the population in the former Yugoslav Republic of Macedonia*. Copenhagen, 2011 (<http://www.euro.who.int/en/where-we-work/member-states/the-former-yugoslav-republic-of-macedonia/publications3/heat-health-action-plan-to-prevent-the-heat-wave-consequences-on-the-health-of-the-population-in-the-former-yugoslav-republic-of-macedonia>, accessed 17 July 2013).
 - WHO Regional Office for Europe. *Climate change and its impact on food and nutrition security – a report on an assessment conducted in four regions of the Autonomous Republic of Karakalpakstan, Uzbekistan*. Copenhagen, 2011.
 - WHO Regional Office for Europe. *International Climate Initiative Final Report –Status Report. Protecting health from climate change in Uzbekistan* (evaluation of the Practical Approach to Lung Health (PAL) within project 08 II 007 UZB M). Copenhagen, 2012:3.
 - Ministry of Health, Republic of Albania. *Albanian strategy for the health system adaptation to the climate change*. Tirana, 2011.
 - Ministry of Health of the Kyrgyz Republic. *Programme of the health sector of the Kyrgyz Republic on climate change adaptation for 2011–2015*, Bishkek, 2011.
 - World Health Organization. *Health in the green economy: health co-benefits of climate change mitigation – transport sector*. Geneva, 2011 (http://www.who.int/hia/green_economy/transport_sector_health_co-benefits_climate_change_mitigation/en/index.html, accessed 17 July 2013).
 - United Nations. *From transition to transformation: sustainable and inclusive development in Europe and central Asia* (inter-agency report). New York/Geneva, 2012.
 - World Health Organization. *Measuring health gains from sustainable development* (http://www.who.int/hia/green_economy/sustainable_development_summary1.pdf, accessed 17 July 2013).
 - World Health Organization. *Health in the green economy: health co-benefits of climate change mitigation – housing sector*. Geneva, 2012 (http://www.who.int/hia/green_economy/housing_report/en/index.html accessed 17 July 2013).
 - Ministry of Health Republic of Albania. *Protecting health from climate change in Albania: vulnerability assessment report*. Tirana, 2012.
 - United Nations in the Russian Federation. *Climate change impact on public health in the Russian Arctic*. Moscow, 2012.
 - Sidorov PI et al. *Strategy for adaptation to climate change impacts on the population's health in the Arkhangelsk Region and Nenets Autonomous District of the Russian Federation*. Arkhangelsk, Ministry of Health/Northern State Medical University, 2012.
 - WHO Regional Office for Europe/Ministry of Health of the Republic of Kazakhstan. *Protecting health from climate change in Kazakhstan*. Astana, 2012.
 - WHO Regional Office for Europe/Ministry of Health of the Republic of Kazakhstan. *Report: Impact, vulnerability and adaptation assessment of climate change and health in the Republic of Kazakhstan*. Astana, 2012.
 - WHO Regional Office for Europe/Ministry of Health of the Republic of Tajikistan. *Protecting health from climate change in Tajikistan*. Dushambe, 2012.

- European Environment Agency. *Climate change, impacts and vulnerability in Europe 2012*. Copenhagen, 2012. (<http://www.eea.europa.eu/publications/climate-impacts-and-vulnerability-2012>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Climate change and health: lessons learnt in the WHO European Region – Meeting report, 4–6 June, Copenhagen, 2012* (http://www.euro.who.int/__data/assets/pdf_file/0004/186205/Climate-change-and-health-Lessons-learnt-in-the-WHO-EURO.pdf, accessed 17 July 2013).
- WHO Regional Office for Europe. *Establishment of a Working Group on climate change and its impact on health (HIC) of the European Environment and Health Task Force (EHTF) – Meeting report 4–6 June 2012*. Copenhagen, 2012 (http://www.euro.who.int/__data/assets/pdf_file/0005/186242/e96844.pdf accessed 17 July 2013).
- WHO Regional Office for Europe. *Climate change and health: a tool to estimate health and adaptation costs*. Copenhagen, 2013 (http://www.euro.who.int/__data/assets/pdf_file/0018/190404/WHO_Content_Climate_change_health_DruckII.pdf, accessed 17 July 2013).
- WHO Regional Office for Europe. *Floods in the WHO European Region: Health effects and their prevention*. Copenhagen, 2013 (http://www.euro.who.int/__data/assets/pdf_file/0020/189020/e96853.pdf accessed 8 July 2013).
- WHO Regional Office for Europe. *Responding to the health challenges posed by a changing climate in the European Union* (forthcoming 2013).
- WHO Regional Office for Europe. *Protecting health from climate change in Central Asia: supporting national adaptation capacities* (forthcoming 2013).
- WHO Regional Office for Europe. *Climate change and health in the Mediterranean: a policy action guide for all* (forthcoming 2013).

Knowledge and tools for policy-making and implementation

- WHO Regional Office for Europe. *Strengthening the implementation of health impact assessment in Latvia*. Copenhagen, 2012 (<http://www.euro.who.int/document/e96481.pdf>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Using impact assessment in environment and health: a framework. Capacity Building in Environment and Health (CBEH) project*. Copenhagen, 2013 (http://www.euro.who.int/__data/assets/pdf_file/0007/190537/e96852-final.pdf, accessed 17 July 2013).
- WHO Regional Office for Europe. *Continuous training in environment and health. Capacity Building in Environment and Health (CBEH) project*. Copenhagen, 2013 (http://www.euro.who.int/__data/assets/pdf_file/0003/191802/Continuous-training-in-environment-and-health.pdf accessed 17 July 2013).
- Joint training workshop organized by the State Health Office, Baden-Württemberg, Germany (LGA) and the WHO European Centre for Environment and Health: Exposure assessment survey in schools using the standardized WHO methodology. Stuttgart, Germany, 24–25 January 2013.
- WHO Regional Office for Europe. *Tools for monitoring of Parma Conference commitments. Report of a meeting, Bonn, Germany, 25–26 November 2010*. Copenhagen, 2011 (<http://www.euro.who.int/en/what-we-do/data-and-evidence/environment-and-health-information-system-enhis/publications/meeting-reports/tools-for-monitoring-parma-conference-commitments>, accessed 17 July 2013).

Forthcoming publications

- WHO Regional Office for Europe. *The climate change and health vulnerability assessment in the Republic of Tajikistan*.
- Ministry of Health of the Republic of Tajikistan. *National climate change health adaptation strategy and action plan 2011–2020*.
- WHO Regional Office for Europe. *Preventing the health effects of cold weather and cold waves* (forthcoming 2013).

- WHO Regional Office for Europe. *Methods for monitoring indoor air quality in schools. Report of a meeting, Bonn, Germany, 4–5 April 2011*. Copenhagen, 2011 (<http://www.euro.who.int/en/what-we-do/data-and-evidence/environment-and-health-information-system-enhis/publications/meeting-reports/methods-for-monitoring-indoor-air-quality-in-schools>, accessed 17 July 2013).
- WHO Regional Office for Europe. *Monitoring the implementation of Parma conference commitments: methodological and organizational issues. Report of a meeting, Bonn, Germany, 29–30 September 2011*. Copenhagen, 2012 (<http://www.euro.who.int/en/what-we-do/data-and-evidence/environment-and-health-information-system-enhis/publications/meeting-reports/monitoring-the-implementation-of-parma-conference-commitments-methodological-and-organizational-issues>, accessed 17 July 2013).

Forthcoming publications

- *Strengthening HIA and health in impact assessment in Estonia. Gap analysis and way forward* – in press.
- *Strengthening HIA and health in impact assessment in Slovenia. Gap analysis and way forward* – in press.
- *Capacity Building in Environment and Health (CBEH). An intersectoral training package for environment and health experts*.
- *Monitoring the implementation of Parma Declaration commitments: organization of data collection. Report of a meeting, Bonn, Germany, 29–30 October 2013*.

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