Environmental health research—from studying the effects of inefficient household cookstoves to conditions created by climate change—can play an important role in setting the global policy agenda around sustainable development, according to leading environmental health experts. As a leader in environmental health research, NIEHS is actively engaged in the process (See box).

In September 2015, heads of state will meet to adopt what is called the “post-2015 development agenda,” as proposed at the United Nations Conference on Sustainable Development (known as the Rio+20) in 2012. They are also expected to sign on to more specific Sustainable Development Goals (SDGs) that look beyond 2015.

“Environmental health and sustainable development need to be linked in a meaningful way,” said Andrew Haines, M.D., a professor of public health and primary care at the London School of Hygiene & Tropical Medicine. “This is a way to put flesh on the bones.”

**First Came the MDGs**

In 2000, world leaders adopted the UN Millennium Declaration, which laid out eight Millennium Development Goals (MDGs) that countries would accomplish by 2015. While the goals will not be fully achieved by 2015, they have galvanized global efforts in poverty eradication, health, education, and other areas. The global community is now seeking to continue the progress achieved in the last 15 years through considerations for setting new goals, targets, and indicators. In this new post-2015 development agenda, SDGs will attempt to address issues that the MDGs did not, namely the integration of social, economic, and environmental aspects of development within a sustainability framework.

What might that mean for environmental health? “The MDGs largely focus on traditional concerns, like maternal and child health, and major health burdens like tuberculosis, HIV, and malaria,” said Haines. “These are all very important issues, of course, but the potential for post-2015 is to integrate broader health issues in sustainable development in all countries.”
Sustainable Development and Environmental Health
Sustainable development is frequently defined as development that meets the needs of present generations without compromising the ability of future generations to meet their own needs. The world’s present population of 7 billion is expected to increase to 9 billion by 2050. According to a 2006 analysis conducted by the World Health Organization, 24 percent of the world’s burden of disease—the figure is higher in the poorest countries of the world—is attributable to modifiable environmental factors. The most recent Global Burden of Disease report showed that indoor and ambient air pollution were jointly responsible for over 6 million deaths every year. “There is a driving need to create goals and indicators that guide the sustainable development agenda towards investments that address both environmental and health problems,” noted John Balbus, M.D., M.P.H. NIEHS Senior Advisor for Public Health.

Country Profiles of Environmental Burden of Disease

Preparing for the SDGs
The United Nations has set up many ways to gather input from technical experts, civil society representatives, and other stakeholders to draft the SDGs.
These efforts include *A New Global Partnership: Eradicate Poverty and Transform Economies through Sustainable Development*, the report of a high-level panel convened by UN Secretary General Ban Ki-moon. The panel provided what it termed illustrative, rather than prescriptive, SDG goals and national targets, and called for five transformational shifts to achieve them:

- Leave no one behind
- Put sustainable development at the core
- Transform economies for jobs and inclusive growth
- Build peace and effective, open, and accountable transformations for all
- Forge a new global partnership.

At a series of Open Working Sessions, participants are now delving into the specifics. “The Open Working Sessions are very important in developing the details,” noted Haines. Information on the sessions, which began in March 2013 and run through February 2014, is on the [SDG portal](#).

Within the UN system, the World Health Organization has two groups focused on the post-2015 agenda. “One group is focused on health systems and health information,” said Carlos Dora, coordinator of the WHO Public Health and Environment Department. “The responsibility of our group is to include health indicators in other sustainable development goals.”

Among other resources, the department will draw on an expert consultation held in partnership with NIEHS in 2012. “That meeting went very well,” said Dora. “We looked at areas discussed at Rio +20 and came up with an articulation of what the health connections are.”

**Translating Research Into Policy**

As evidence of the harm to health and well being from widespread environmental degradation and global climate change grows, decision makers want to ensure that economic development is achieved in a sustainable way. Substantial health-related economic benefits gained from climate mitigation and sustainable policies related to energy, transportation, agriculture, and food consumption highlight the need for intersectoral approaches to achieving health benefits by addressing environmental health problems.

“The interconnectedness of the environment, economic, and social development with human health requires systems thinking rather than more narrow, focused development programs and goals,” according to Balbus. “Health indicators can play a critical role in tracking the success of targets and goals in other sectors.”

Dora urged environmental health researchers to share their knowledge in the development of the SDGs. “It’s very important to have the depth and scientific rigor of environmental health research,” said Dora. “The environmental health field needs to make connections with other sectors, such as energy and transportation. We need to understand the wider socioeconomic and political environment, so we can use our understanding to inform policy.”
In addition to the contribution of decades of research that have provided insights into the health linkages of exposures to chemicals, air pollutants, and other climate change-related stressors, NIEHS has supported research translation efforts to help inform the broader process of determining post-2015 development goals and indicators.

Through its sponsorship of the Institute of Medicine Roundtable on Environmental Health Sciences, Research and Medicine, NIEHS supported a series of workshops and webinars to raise awareness of the role of environmental health at the Rio+20 Sustainable Development Summit that took place in June 2012, as well as of the subsequent UN development agenda processes. This series included a workshop on Public Health Linkages with Sustainability in July 2011 and a series of webinars on Global Development Goals and Linkages to Health and Sustainability in partnership with the Pan American Health Organization.

NIEHS also partnered with the World Health Organization on an expert consultation that took place a month before the June 2012 Rio +20 Summit, and provided a substantive review of potential goals and indicators to track environmental health impacts of development in other sectors. This meeting produced seven briefing documents on health indicators for other sectors including energy, water, and sustainable cities.