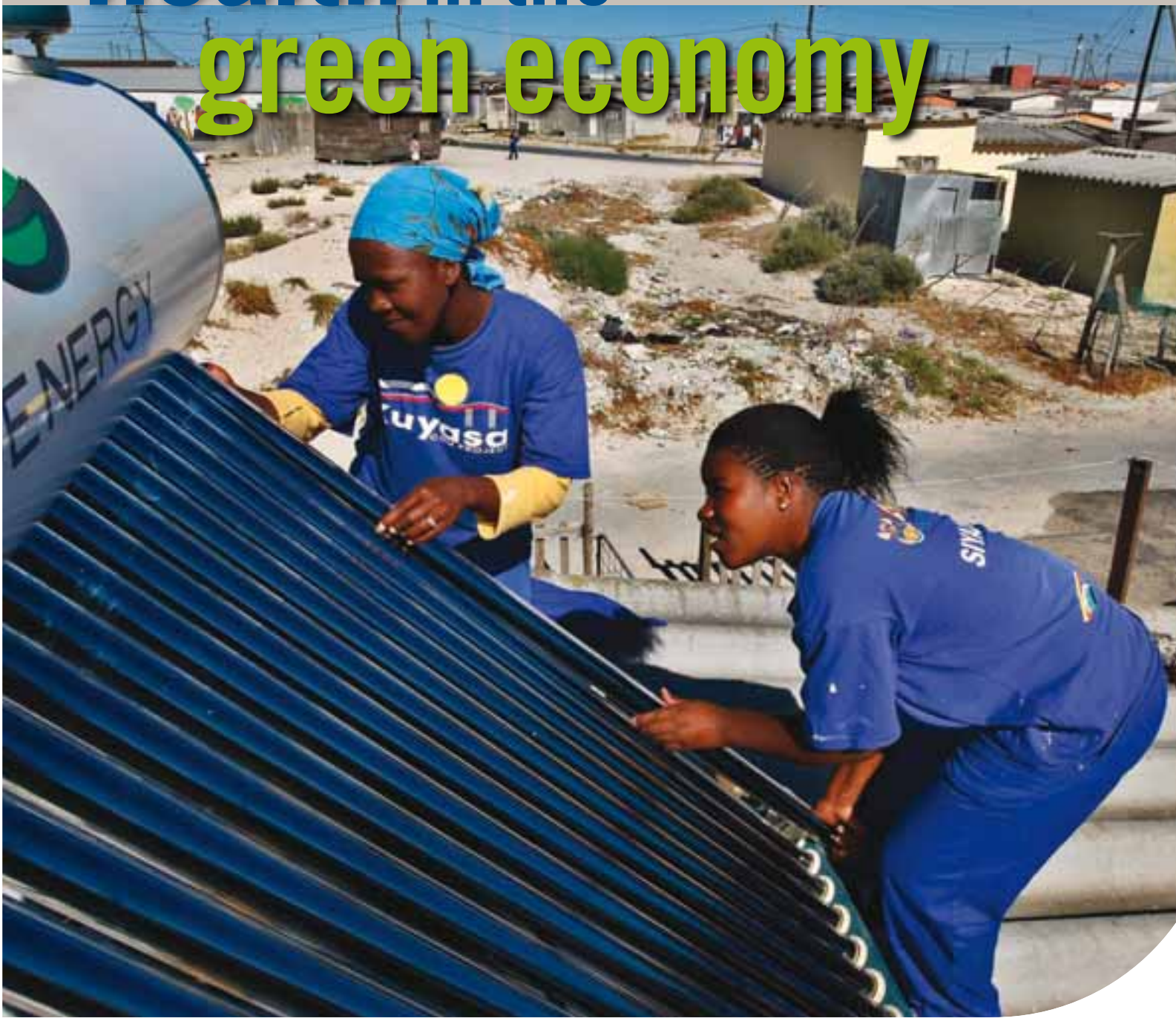
Health co-benefits of climate change mitigation – Housing sector

Health in the green economy



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Cover photo: A team of workers affix a passive solar hot water heater to a home in Kuyasa, South Africa, as part of an energy efficiency and housing upgrade project in a low-income area of Cape Town. The project has been credited with helping to reduce a range of housing-related diseases. It is also the first in South Africa to qualify for finance under the Clean Development Mechanism of the United Nations Framework Convention on Climate Change (UNFCCC). See Case Study, Chapter 6. (Photo credit: Nic Bothma/Kuyasa CDM)

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Foreword

Evaluation of the health impacts of climate mitigation strategies is critical to informed decisions that will attain the greatest combined gain for health, well-being and sustainable development.

(Photo: Nic Bothma/ Kuyasa CDM)

This report considers the scientific evidence regarding possible health gains and, where relevant, health risks of climate change mitigation measures in the residential housing sector. The report is one in a *Health in the Green Economy* series led by WHO's Department of Public Health and Environment. Other reports in the series focus on transport, household energy in developing countries, agriculture and health care facilities.

The focus of analysis is mitigation measures discussed in the *Fourth Assessment Report*[i] of the Intergovernmental Panel on Climate Change, which represents the UN system's most broad-based scientific assessment of mitigation options. The aim is thus to provide health-oriented review of mitigation strategies around which broad scientific consensus already exists as to impact and feasibility.

The report documents how certain mitigation options can yield substantial co-benefits to health. Some choices, however, may be better than others in terms of health impacts, or reducing health risks. New and sometimes overlooked opportunities are also examined where health gains and sustainability objectives can be mutually reinforcing.

These findings have twofold relevance.

For the health community, they represent a major opportunity to promote "primary prevention" by informing policy-makers and the public about how better health can be obtained from economic investments in housing.

Also, evaluation of health impacts touches the core of a debate that has stalled climate change negotiations – the debate about who 'gains' and who might 'lose'. Looking at health co-benefits creates a different paradigm, one that is 'win-win' for most people, and for the planet.

In fact, there is good evidence that many climate mitigation strategies can yield both immediate and more sustained global public health benefits – in rich and poor societies, temperate or tropical, urban and rural.

Often these health benefits can be derived at comparatively low cost – and at almost no cost to resource-strapped health services – but rather through more careful, strategic, and health-focused development investments.

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[i] Metz, B et al. eds. *Climate Change 2007: Mitigation of Climate Change. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge & New York, Cambridge University Press, 2007.

In terms of housing, for instance, health benefits may be derived when mitigation policies also: improve indoor air quality; reduce exposure to heat waves and extreme cold; prevent vector and pest infestations; prevent home injuries; improve safe drinking-water and sanitation access; avoid use of toxic and hazardous construction materials; reduce vulnerability to floods, mud slides and natural disasters; and support slum redevelopment and better environmental design of transport, energy and utility infrastructure in fast-growing developing cities.

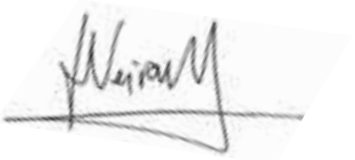
For some key measures, there is quantifiable evidence of economic savings in health care costs. For instance, investments in home insulation have reduced health care costs of chronic respiratory disease in some settings, justifying investments made in large-scale housing improvement programmes. More such cost-benefit evaluation would likely make the case for action even more compelling.

This report identifies key "co-benefits" themes and possibilities. More evidence, however, is needed about health impacts of specific interventions. Also, development policies, subject to multiple political and economic forces, can be difficult to implement – even with the powerful logic of health. Still, the challenges of action are no excuse for inaction.

Addressing pressing public health priorities through mitigation strategies is clearly better than not doing so. Such strategies, once understood, are likely to receive broad public and political support. By identifying what health gains are expected and how health may benefit, we also contribute to the dialogue about how different models of production and consumption impact on the epidemic of noncommunicable disease, on resurgence or emergence of new disease epidemics and on the stubborn intransigence of certain diseases of poverty.

Let us also acknowledge that the ultimate goal of climate change mitigation is better human health and well-being. So why not make it central to our strategies as well?

By refocusing the debate around health, with responsible use of evidence, we translate abstract climate concepts into impacts on diseases and issues that people know and care about. This series makes the fundamental case that investments in climate change mitigation can produce better health, at lower cost, if informed decisions are made. This advances the goal, as articulated in WHO's 1948 Constitution, to promote "the highest attainable standard of health" as "one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition." This series seeks to outline such important opportunities.



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