

# A sustainable design vision



How can design help address and generate solutions for some of the most important issues facing our planet and its people in the coming years? The Philips Design event entitled, **A sustainable design vision – design for sense and simplicity**, focused on just that. With more than 275 people, from all 12 branches of Philips Design, coming together with some of the world’s foremost sustainability thinkers and practitioners, we challenged ourselves to move sustainability forwards with imagination.

## The 21st century challenge

“The challenge of the twenty-first century is to increase people’s quality of life, across all regions, while containing the overall consumption of natural resources,” says Simona Rocchi, Director of Sustainable Design at Philips Design. The world’s population is projected to reach 8 billion people by 2025, increasing pressure on resources and the environment, and there will be an ever-widening gap between high income and low income people. As a result, “We must learn how to satisfy the needs and wants of an expanding population in a sustainable way,” says Rocchi.

## Global solutions are not always the answer

Sustainable design approaches this by paying attention to regional as well as local community needs. “We have to expand the traditional eco-design approach of focusing only on technical improvements to make a product better environmentally,” explains Rocchi. “We also need to make the solutions relevant by focusing on the social and cultural requirements of the people, as well as the various contexts of applications. Only by appropriately relating and linking the technology to local values and conditions can we provide truly meaningful solutions.” This means developing sustainable solutions that extend the lifetime of a product, minimize the materials used in its construction and consume energy efficiently in a way that works for people locally. “We cannot pretend that global solutions will always work for everyone,” says Rocchi. “They must be customized to specific contexts to be environmentally friendly, socially effective, and economically valuable. Otherwise they’ll never be truly sustainable.”

Rocchi believes design has a valuable role to play in sustainability because of its ability to overcome tough problems with measured creativity. “Design explores the new and is the bridge between technology, society and business. It is sensitive to cultural conditions, social trends and the potential of new technology, and is able to translate this into valuable propositions for business by envisioning solutions grounded in new ways of production and consumption.”



### The sustainable design vision workshop

The sustainable design vision workshop aimed to put just such fresh thinking to good use. “We wanted to develop solutions to improve people’s quality of life, either by relieving the suffering caused by an event such as an earthquake or tsunami or by empowering non-government organizations (NGOs) and people in their communities to create economic and social development,” explains Rocchi. Some of the topics tackled by the workshop read like a roll call of the emerging and developing world’s problems: malnutrition, pneumonia, malaria, sanitation, water purification, air pollution, lighting and illiteracy. Sustainable solutions for advanced markets were specifically addressed by the inclusion of issues such as insomnia, stress, diabetes, obesity, unemployment and rising energy costs.

The workshop was undoubtedly a success, generating more than 80 possible solutions in the one-and-a-half days of concentrated creative brainstorming. This intense burst of focused creativity was the fruit of six months of extensive preparation by a project team drawn from all regions of Philips Design. Their work included consultation with NGOs and field visits to observe and interview people in their local communities. Along the way, they unearthed countless valuable nuggets of information, such as the need in emerging markets for microscopes that project the image of the malaria parasite under the lens onto a large screen, to allow efficient training of volunteers who will carry on the work after the NGO’s leave the area.

Bas Griffioen, a Philips Design Senior Project Manager responsible for the workshop, also highlights the value of the tools developed to streamline the creative process during the workshop. The participants were divided into groups comprising people with different backgrounds and capabilities that included product design, interaction design, communication design, people research, consumer expertise, trend analysis, etc. The group facilitators received dedicated training prior to the event. A manual and a series of exercises and templates were specially devised for the workshop.

“This helped the facilitators steer the creativity of their group,” says Griffioen. “And the process and way of thinking will continue to enrich the value creation process at Philips Design.” This workshop is part of Philips Design’s Cultural Program, an ongoing development program established to ensure that Philips Design remains on the cutting edge of human focused design.

Each group was provided with a framework to help them explore their particular topic from the point-of-view of those experiencing it. “We asked the group not just to solve the problem, but also to look at the consequences, values and behaviors related to the problem,” explains Griffioen. “An issue such as inadequate lighting has the consequence that people cannot learn at night. That isn’t such a problem when people go to school, but many girls in certain areas gather wood for the stove and prepare food and water during the day. As a consequence they don’t have the time to learn during the daytime. Proper lighting in the evening gives them an additional chance at education.” The groups put every issue into this framework – values/behaviour > problem > consequences – and then brainstormed sustainable solutions. “The scope was not just designing a new light source, but also how to get it into the home and educate people to use and maintain it,” explains Griffioen.

Personas were a key tool used in the workshops to ensure people-focused solutions. A persona is a briefing from the perspective of a person experiencing one of the topics covered by the workshop. Their compelling story is presented in the wider context of quantitative and qualitative data covering the key issues. For example, we experience a day in the life of Clayton Jones, a 38-year-old African American with Type 1 diabetes. The detailed insights he provides are set alongside the relevant dietary, healthcare and technological issues relating to the condition in the US. “The Personas helped the groups obtain insights into the people: their social and cultural lifestyle, their priorities and their daily life,” says Rocchi.



Important to the groups' understanding of the issues was also the participation of representatives from three NGOs working in the field. These were, Darryck Klarkowsky of Medicines Sans Frontiers (MSF), an international humanitarian aid organization which provides emergency medical assistance to populations in danger worldwide; Meredith McWade of Save the Children, which provides opportunities for the world's children to live safe, healthy and fulfilling lives; and Dave Irvine-Halliday of the Light Up The World Foundation (LUTW), which provides white LED lighting solutions powered by renewable energy to the world's poor in ecologically sensitive and remote rural areas.

### The co-creation process

"The workshop was the starting point for what we call the co-creation process," says Rocchi. "Often, to develop a sustainable solution we need to co-design with multiple players. We need to combine our knowledge and capabilities with external, complementary expertise. For example, if our task is to provide an affordable and efficient light source and a system to power and deliver it, we need technology and social partners for that." As well as helping prepare the workshop, the three inspirational figures gave introductory speeches outlining the key issues they faced in their work. They also worked with the brainstorming groups and will stay in touch with the project to help get some of the ideas into the field.

The value of the workshop is reflected in the solutions, designed around the intended users and their social environments. One example is a rechargeable portable indoor lamp concept called Depak, which uses white LEDs and solar panels to provide highly efficient light to a family living in an isolated rural area; it also allows an individual to remove a single white light stick to use as a personal torch. Another example is a smokeless wood-burning stove that tackles the respiratory problems affecting millions of people in India and other developing societies who cook indoors with biomass fuels. "What we learned is that an appropriate solution had to consider regional differences in the ways of cooking," says Rocchi. "In India for instance, some people prefer the taste of food cooked with wood, and often they combine cooking functions with steaming and boiling water for purification purpose. If we had provided a device made only for Western culinary habits it wouldn't have worked for them."

### Philanthropy by doing

In contrast to traditional philanthropy in the form of financial donations, this approach dubbed 'philanthropy by doing', creates brand equity by leveraging Philips' internal capabilities, technology and know-how to envision innovative sustainable solutions. "Providing the most appropriate technology, capability and knowledge for humanitarian philanthropic propositions brings our brand positioning to life. It can deliver products and solutions based on real people's needs and their different manifestations; solutions that reduce the burden on the environment and are easy-to-access, simple to install, use, maintain and upgrade over time."

Finally, the workshop created more awareness within Philips Design of the social, cultural and environmental challenges likely to affect designers in their future work. "We need to continue to create and innovate, and make sure our envisioned solutions are considering the broader context and issues such as accessibility," says Rocchi. Griffioen agrees. "Who are we to think we can solve other people's problems alone? We need a deep understanding of the issues and to do that we need to ally our capabilities and knowledge with local players and NGOs." It sounds like a vision for sustainable design – as well as a sustainable vision for design.

