



SUSTAINIA100

-100 solutions for a sustainable future

INTRODUCTION

What is Sustainia100?

[Sustainia100](#) is an annual guide to 100 innovative sustainable solutions from around the world. The guide identifies readily available projects, initiatives and technologies at the forefront of sustainable innovation. The Sustainia100 gives investors, business leaders, policy makers and consumers insights into promising solutions within their respective fields. These vetted solutions span from Western innovation hubs to emerging economies and are divided into 10 sectors, each with 10 solutions (see box). The 2014 edition of the Sustainia100 will be launched on *June 16, 2014* in Oslo.

How are the 100 solutions selected?

Sustainia has adopted a systematic approach to collecting solutions in concert with a global sustainability network. This year-round approach ends with a final call for solutions on *March 14, 2014*. Through our online platform, innovators from around the globe can [submit](#) their solutions or tip us on solutions they find interesting. The submissions are supplemented by extensive research carried out internally to ensure quality as well as geographic and sector diversity. Finally, in consultation with an independent Advisory Board, the solutions are carefully vetted and selected using the five Sustainia100 evaluation criteria (see box).

What is the Sustainia Award?

[The Sustainia Award](#) is given to one of the selected 100 solutions in Sustainia100. Honorary Chair of Sustainia, Arnold Schwarzenegger, heads the Sustainia Award Committee that also includes former Prime Minister Gro Harlem Brundtland, EU Commissioner of Climate Action Connie Hedegaard and Chair of the IPCC Dr. Rajendra Pachauri. The committee honors the winner at a ceremony in Copenhagen, which will be held on *October 30, 2014*. The Sustainia100 and Sustainia Award are interlinked events working throughout the year in the process illustrated below:



Who is behind Sustainia100?

International think tank Sustainia is behind the annual Sustainia100 guide. Sustainia brings together an international alliance of partners – companies, NGOs, foundations and thought leaders - that work together across sectors to accelerate sustainable transformation of industries and lifestyles. Partners include: UN Global Compact, the EU Commission, Arnold Schwarzenegger's initiative Regions20, International Federation for Housing and Planning along with world-leading companies and organizations: WWF, Novo Nordisk, DNV, Microsoft, Philips Lighting, Cisco, Realdania, Brunata, Ramboll and Gehl Architects.

EVALUATION CRITERIA

- 1 Readily available
- 2 Positive environmental impact
- 3 Financially viable
- 4 Improve quality of life
- 5 Scalability

SUSTAINIA100 SECTORS

- ✓ Buildings
- ✓ Food
- ✓ Fashion
- ✓ Transportation
- ✓ IT
- ✓ Education
- ✓ Energy
- ✓ Health
- ✓ Cities
- ✓ Resources



METHODOLOGY

For the Sustainia100 we look for solutions, projects, technologies and business models that hold inspirational value – winning both hearts and minds. We will evaluate all candidates using a set of carefully chosen criteria.

We strive to make Sustainia100 a valuable tool that can guide the transformation to a sustainable society, which can only be achieved by learning from our mistakes. This is why transparency matters to us. It allows our readers to engage with us, evaluate our choices and help us improve the Sustainia100 publication each year. We believe that a transparent methodology is important for two reasons. Firstly, it helps our readers understand what Sustainia100 is and the reasoning behind it. Secondly, it allows readers to critique our choices, allowing us to learn from our experiences.

Selection Process

The research for Sustainia100 is carried out by the Sustainia research team in concert with the global sustainability community through a formal call for solutions. Our online platform enables anyone to submit a solution and Sustainia has given consideration to all solutions, projects or initiatives submitted to our research team. In this process, we rely greatly on our network of partners and their networks to amplify the call for solutions. Moreover, the research team carries out extensive research to ensure the sectoral and geographical diversity of solutions.

In 2013, the call for solutions process resulted in 500+ applicants for review with solutions from 79 countries, spanning all 10 sectors, and representing a wide variety of organizational types and diverse business models.

Once the call for solutions ends and final research has been conducted, the research team will begin a systematic process of selecting the 100 best solutions. This includes evaluating each candidate through specific evaluation criteria (see below) and consultancy with an Advisory Board of external experts.

Within each sector, the Sustainia research team will identify up to 25 solutions and projects that reach the highest level across the five criteria. This enables us to select approximately 250 candidates to be presented to our external Advisory Board of sector experts.

Advisory Board members are also asked to utilize the evaluation criteria when making their judgments on solutions within their field of expertise. They were also encouraged to apply their sector-specific expertise and knowledge about sustainability during this process, and to share all considerations or concerns in meetings with Sustainia's research team. Advisory Board members are furthermore invited to suggest alternative candidates that they felt deserved consideration.

Guided by input from the advisors, we request additional information from approximately 120 candidates directly. With this information, we are able to answer outstanding questions and qualify our final selection of the 100 solutions included in the Sustainia100.

Advisory Board

The Sustainia100 Advisory Board consists of experts with whom Sustainia has a non-financial relationship. Sustainia is in close dialogue with the advisors, who have been encouraged to disclose any biases, such as technology preferences, personal interests, or policies of organizations they represent.

"With this solution-based approach, Sustainia100 delivers a clear and comprehensive call for action to a broad audience of politicians and corporations as well as civil society"

DR. RAJENDRA K. PACHAURI,
CHAIR OF UN CLIMATE CHANGE
PANEL, IPCC, AND SUSTAINIA
AWARD COMMITTEE MEMBER

In 2013, the Sustainia100 Advisory Board consisted of 17 sustainability experts (some members of the Advisory Board have asked to remain unaccredited due to internal policies of the organizations they represent):

WWF International:

- ✓ Stefan Henningsson, Senior Adviser Climate Innovation, WWF International
- ✓ Stephan Singer, Director Global Energy Policy, WWF International
- ✓ Jean-Philippe Denruyter, Manager, Global Renewable Energy Policy chez WWF International
- ✓ Patrick Hofstetter, Climate Policy Campaigner, WWF Switzerland
- ✓ Sabina Andrén, Project Manager, Sustainable Cities, WWF Sweden
- ✓ Subhro Sen, Senior Programme Officer, WWF India

Ramboll:

- ✓ Lars Ostenfeld Riemann, Group Director, Buildings
- ✓ Søren Hansen, Project Director, Urban Development & Transportation
- ✓ Lisbet Poll Hansen, Senior Project Manager, Sustainability and Environment
- ✓ Anders Dyrelund, Senior Market Manager, Energy and Climate
- ✓ Hanne Tine Ring Hansen, Chief Consultant, Buildings and Sustainable Building Design Consultancy

Pegasus Capital Advisors:

- ✓ Jennifer Hickman, Operating Partner

Foundation for Environmental Education:

- ✓ Sarah Pickering, Program & Communications Director

Aarhus University:

- ✓ Martin Brynskov, associate professor

Independent Experts:

- ✓ Graham Vickery, Ph.D., Information Economics, former head of Information Economy Group, OECD
- ✓ Brian Edwards, Emeritus Professor of Architecture (ECA – Edinburgh University)

Evaluation Criteria

Below we describe our evaluation criteria in further detail as well as what characterizes the qualified, the good and the excellent Sustainia100 solutions.

1. Readily available

Sustainia100 solutions and projects are real. They must be more than just vague ideas or blueprints. Sustainia100 solutions are tangible and able to move us towards a sustainable society. However, we do include solutions that are not yet realized and some that are only prototypes. Such cases are only included if they have strong commitment from investors, partners, markets, or politicians that suggest further development is very likely.

Qualified candidates are beyond theory, prototypes and blue prints. To have true inspirational value and an ability to transform, they must be proven concepts that are either deployed or ready to be.

Good candidates are well communicated and the organizations or individuals behind them are ready to engage with stakeholders and are able to demonstrate their innovation in a tangible way, e.g. through prototyping, pilot projects or small scale production.





Excellent candidates have either been tested in full scale, are proven relevant or are deployed in the context for which they are intended. Excellent solutions should either be in the market for consumers, ready to be invested in, or implemented in a community.

2. Positive environmental impact

A Sustainia100 solution is environmentally ambitious and climate-friendly.

At the very least, Sustainia100 candidates represent an improvement from the status quo in terms of having a positive impact on global climate or local environmental factors. The best candidates incorporate cutting-edge technologies or methods that challenge present standards and business as usual.

Qualified candidates can present proof of how they have a positive climate or environmental impact in their sector. They are either changing habits, improving efficiency or have a direct, positive environmental impact.

Good candidates have potential for more than just incremental improvements. We do however also recognize solutions and projects that make small but lasting improvements.

Excellent candidates incorporate cutting-edge technologies and methods and/or compliance with state-of-the-art standards and principles. This may include such things as recognized standards, optimized use of efficient renewable energy sources, life-cycle-analysis and/or life-cycle-costing approaches, etc.

3. Financially viable

The cost of a given solution or project must be justified in light of its promised benefits. Does the solution or project hold an attractive value proposition that makes it worth the cost? Candidates are not discredited for relying on subsidized or highly philanthropic business models. But affordability and financial sustainability are key qualities for Sustainia100 candidates.

Qualified candidates for Sustainia100 have given consideration to the potential for attracting financial support. There is a realistic funding potential, e.g. in the form of venture capital, customer revenues, grants, subsidies etc.

Good candidates build on a tangible business or financial model that can sustain them in the longer run. Good solutions are cost-effective and can become self-sustaining within a realistic time span. Such solutions will have the capability to displace alternative/competing solutions or projects that deliver inferior environmental or social performance, as they deliver superior performance at an acceptable or even attractive cost.

Excellent candidates are self-financing or commercially viable. If a public good, we look at the degree to which commitment to public financing exists or could realistically be obtained. Other characteristics at this level may be that a solution or project holds potential for driving substantial market changes through a disrupting business model.

4. Improve quality of life

We look for solutions that promise to improve the overall quality of life. Sustainia100 solutions should enhance the quality of life for citizens, and help communities to bring about real change. This could be in the form of better use of food resources, increased social mobility or tools for combating poverty, improving health or giving access to education and other poverty-depleting resources.

"Congratulations to the Sustainia100 for 2013. They are the true action heroes of sustainability."

ARNOLD SCHWARZENEGGER,
HONORARY CHAIR,
SUSTAINIA

Qualified candidates promise to positively impact living conditions for those individuals involved in, targeted by or is adopting the solution. At this level consideration is given to concrete metrics on which such improvements may be delivered.

Good candidates create the possibility of incremental transformation that goes beyond single individuals, e.g. spreading improvements to whole communities or beyond. Good solutions can quantify or prove a social impact and they will change the basic needs of those targeted or adopting.

Excellent candidates are capable of making a revolutionary transformation of the everyday life of users. They can deliver systemic change – potentially at a national or global level.

5. Scalability

Incorporating all of the above-listed criteria, we look for projects and solutions that are capable of up-scaling. This essentially covers the solution's ability to have a wider and lasting impact beyond its present state. Scalable solutions are characterized by backing from strong partners, quality management, and a sound business model.

Qualified candidates have a potential for growth or being adopted into other projects or sectors. They are relevant to other agendas, strategies or policies and have a potential for being up-scaled within a generation.

Good candidates hold the technological capacity to expand and grow across regions, countries or other sectors. They have relevance for possible partners and the ability to reach a wider crowd within 10 to 25 years.

Excellent candidates have strategies for up-scaling and the potential to expand significantly. There are agencies deemed appropriate for leading a scale-up or powerful advocates supporting innovation adoption. This creates the potential for expanding across regions, countries and into other sectors within the next 10 years.



SUSTAINIA AWARD

Following the publication of the Sustainia100 at an exclusive launch event in Oslo on June 16th 2014, Sustainia will continue its efforts to celebrate the people, companies, communities, and organizations committed to building sustainable societies. To that end, we will be giving out the third consecutive Sustainia Award. The winner will be selected from the Sustainia100 list and announced at a festive ceremony on October 30, 2014 in Copenhagen.

The Sustainia Award honors outstanding performance within sustainability and the winner is selected by a high-level committee of global sustainability leaders (see below). Moreover, Sustainia invites citizens and sustainability leaders from around the world to the Sustainia Award Ceremony and asks them to vote for their favourite solutions, which will be awarded the Sustainia Community Award. The announcement of the overall Sustainia Award winner will help generate global sustainability awareness and highlight sustainability's benefits and potential.

The Sustainia Award Committee

- ✓ Arnold Schwarzenegger (Honorary Chair), former Governor of California
- ✓ Connie Hedegaard, European Commissioner for Climate Action
- ✓ Gro Harlem Brundtland, former Prime Minister of Norway and former Director-General, World Health Organization (WHO)
- ✓ Dr. Rajendra Pachauri, Nobel Laureate and Chair, Intergovernmental Panel on Climate Change (IPCC)

DEFINING SUSTAINABILITY

The concept of “sustainable development” was introduced in 1987 by the World Commission on Environment and Development, in the report “Our Common Future” (also known as “the Brundtland Report”). The report defines sustainable development as:

“... development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- ✓ *the concept of ‘needs,’ in particular the essential needs of the world's poor, to which overriding priority should be given; and*
- ✓ *the idea of **limitations** imposed by the state of technology and social organization on the environment's ability to meet present and future needs.”*

The notion of the triple bottom line – environmental, social, and economic sustainability – is inspired by the definition from the Brundtland Report, and is also a pivotal point of reference for evaluating the solutions as these three dimensions are reflected in criteria 2-4.

