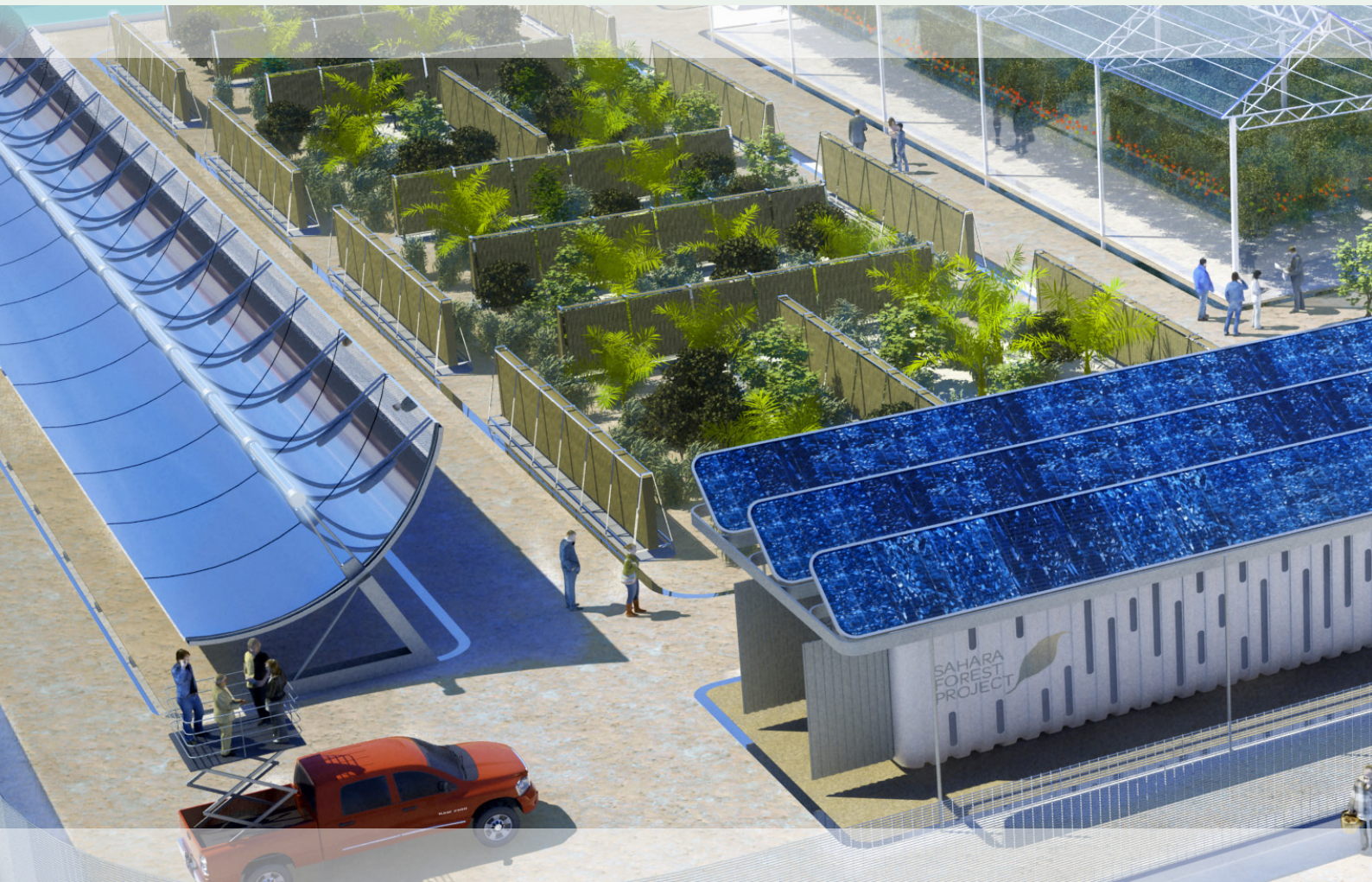


Launching  
The Sahara Forest Project



# QATAR PILOT PLANT



A collaboration between Qafco, Yara International and The Sahara Forest Project AS

## Table of contents

Foreword	page 3
Press Release: Taking root in the sand	page 4
The Pilot Plant	page 6
An oasis of green technologies	page 8
The Sahara Forest Project – too good to be true?	page 10
From vision to reality in Jordan	page 12
The collaborators	page 13
The SFP Board	page 14
The SFP Staff	page 15

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## Contact information for SFP

<b>Web:</b>	<a href="http://www.saharaforestproject.com">www.saharaforestproject.com</a>
<b>E-mail:</b>	<a href="mailto:info@saharaforestproject.com">info@saharaforestproject.com</a>
<b>Phone:</b>	+47 960 48 828
<b>Mail:</b>	P.O. Box 2141 - Grünerløkka 0505 Oslo NORWAY
<b>Visiting address:</b>	Maridalsveien 17B 0178 Oslo



## Foreword

In the cold December of 2009, Copenhagen was hosting the 15th UN Climate Negotiations. The noise and hectic activity of the negotiations were marked by a certain melancholy. More and more of the attendees began to realize that the on-going discussions would not lead to the much-needed binding agreements most had hoped for. It was into this mix that the Sahara Forest Project made its entrance to the international stage. The Bellona Foundation had given us the opportunity to present The Sahara Forest Project concept at the summit, and to host a panel discussion afterwards with key figures in the global climate debate. The turnout and the response were overwhelming. What was to many a disappointing climate summit was for The Sahara Forest Project a promising beginning. It was the starting point of an exciting journey that has taken us from concept to where we are today: ready to build the first integrated SFP facility this year.

The Sahara Forest Project has, since the very beginning, emphasized the importance of answering intertwined challenges with integrated synergistic solutions. Such solutions cannot be developed nor implemented without cooperation across different academic sectors, various industries, and an international network of countries, cultures and people. In The Sahara Forest Project this approach is at the core of our work. Our main owners (Michael Pawlyn, Bill Watts and The Bellona Foundation) constitute a team of solution-oriented actors with backgrounds in innovative architecture, cutting edge engineering, and early identification and promotion of new environmental technologies. Our staff has expertise in fields ranging from physics, engineering, and biology, to economics and environmental planning. The SFP Advisory Board is composed of leaders in finance and social entrepreneurship. More than 60 people from 12 different countries are delivering input to our feasibility studies. Several institutions, countries and regional authorities have also provided invaluable support. And last but not least, large industrial players like Yara International and Qafco have not only contributed with funding, but also with their industrial know-how and deep knowledge of crop nutrition.

Realizing The Sahara Forest Pilot Plant in Qatar will be a team effort. In June 2011 the partnership between Yara International, Qafco and The Sahara Forest Project AS was announced, with the intention to undertake an extensive Feasibility study as the first step of cooperation. Yara International and Qafco have provided funding and support, and have also taken an active part as technology and innovation partners. Now we take the next step. At The Sahara Forest Project, we are very excited that Yara International and Qafco will fund and take part in what will be a ground-breaking cluster of environmental technologies and a unique research platform: The Sahara Forest Project Pilot Plant in Qatar. We are ready to get to work!



**Joakim Hauge**

CEO

The Sahara Forest Project



PRESS RELEASE 27.02.2012

## PIONEERING ENVIRONMENTAL PROJECT TAKING ROOT IN THE SAND

### Fertilizer companies as catalysts for greening the desert

The Sahara Forest Project AS today signed a cooperation agreement for building a Pilot Plant in Qatar together with Yara International ASA and the Qatar Fertiliser Company, Qafco.

The agreement was signed by CEO Khalifa A. Al-Sowaidi of Qafco, CEO Jørgen Ole Haslestad of Yara International and CEO Joakim Hauge of The Sahara Forest Project AS. The estimated cost for the Pilot Plant is 5.3 million USD. Qafco and Yara International will provide the funding. The parties have already started the preparations, and are on schedule to reach the target of having a fully operational Pilot Plant by December 2012.

***"We are very excited to join forces with Qafco and Yara to realize this truly unique system of green technologies. The Pilot Plant will prove the benefits of a holistic approach to challenges in the food, water and energy-sector,"*** says CEO of The Sahara Forest Project, Joakim Hauge.

***"Increased food demand must be met with innovative thinking and an efficient agricultural sector. This project demonstrates that Yara's continuous research and development efforts go well together with environmental activities aiming at solving one of our times' most important challenges,"*** says CEO Jørgen Ole Haslestad of Yara International

***"While contributing with our industrial experience and nutrient knowledge in this environmental project, we are at the same time developing potential new and exciting markets in desert areas,"*** said Mr. Haslestad.

***“QAFCO and Yara are sponsoring this Environmental Project to be executed by Sahara Forest Project in a pilot scale to demonstrate the potential of the Green Technology in arid region like Qatar using seawater and solar energy for future larger scale research and commercial platform in the area of Horticulture, Freshwater generation, Energy Production, Algae Production,”*** said Khalifa Abdulla Al-Sowaldi, Vice-Chairman and CEO of Qafco.

***“This project is expected pave way for commercialization of this green technology for large scale implementation with a vision to produce energy, food and fresh water not only for Qatar but for tomorrow’s world population in a sustainable way,”*** said Al-Sowaldi.

## **One hectare of innovative green technologies**

A one hectare site outside Doha, Qatar, will soon host the SFP Pilot Plant. It will contain a unique combination of promising environmental technologies carefully integrated in a system to maximize beneficial synergies. A wide specter of leading experts and technology developers are taking part in the effort to realize the project. A cornerstone of the pilot is greenhouses utilizing seawater to provide cool and humid growing conditions for vegetables. The greenhouses will also produce freshwater themselves. The greenhouses will be coupled with a state of the art parabolic trough solar collector with a thermal desalination unit supported by PV-technology. The pilot will also allow for cultivation of algae in a system of photobioreactors and open pond cultivation systems.

An important part of the pilot is to demonstrate the potential for cultivating desert land and making it green. Outdoor vertical evaporators will create sheltered and humid environments for cultivation of plants. Additionally, the pilot will contain outdoor hydroponic raceways for cultivation of halophytes – plants tolerant of irrigation with salty water. The facilities in the pilot plant will be supported by on-site laboratories, scientists and professional growers.

***“The Pilot Project in Qatar will demonstrate the benefits of reducing waste streams in technological systems. Our message is that it is possible to design solutions that are good for the environment, good for social development and that have a long-term economic sustainability,”*** commented Joakim Hauge, CEO of The Sahara Forest Project.

***“The Pilot Project is designed to fit in an approximately 10,000 m<sup>2</sup> area inside the Qafco 5 site in Qatar and will consist of Seawater-based greenhouses, Concentrated solar power (CSP) for heat & electricity, Evaporative hedges and ponds for reducing brine to dry salts, Algae cultivation facilities, Vegetated outdoor areas and Halophyte cultivation units,”*** added Al-Sowaldi.

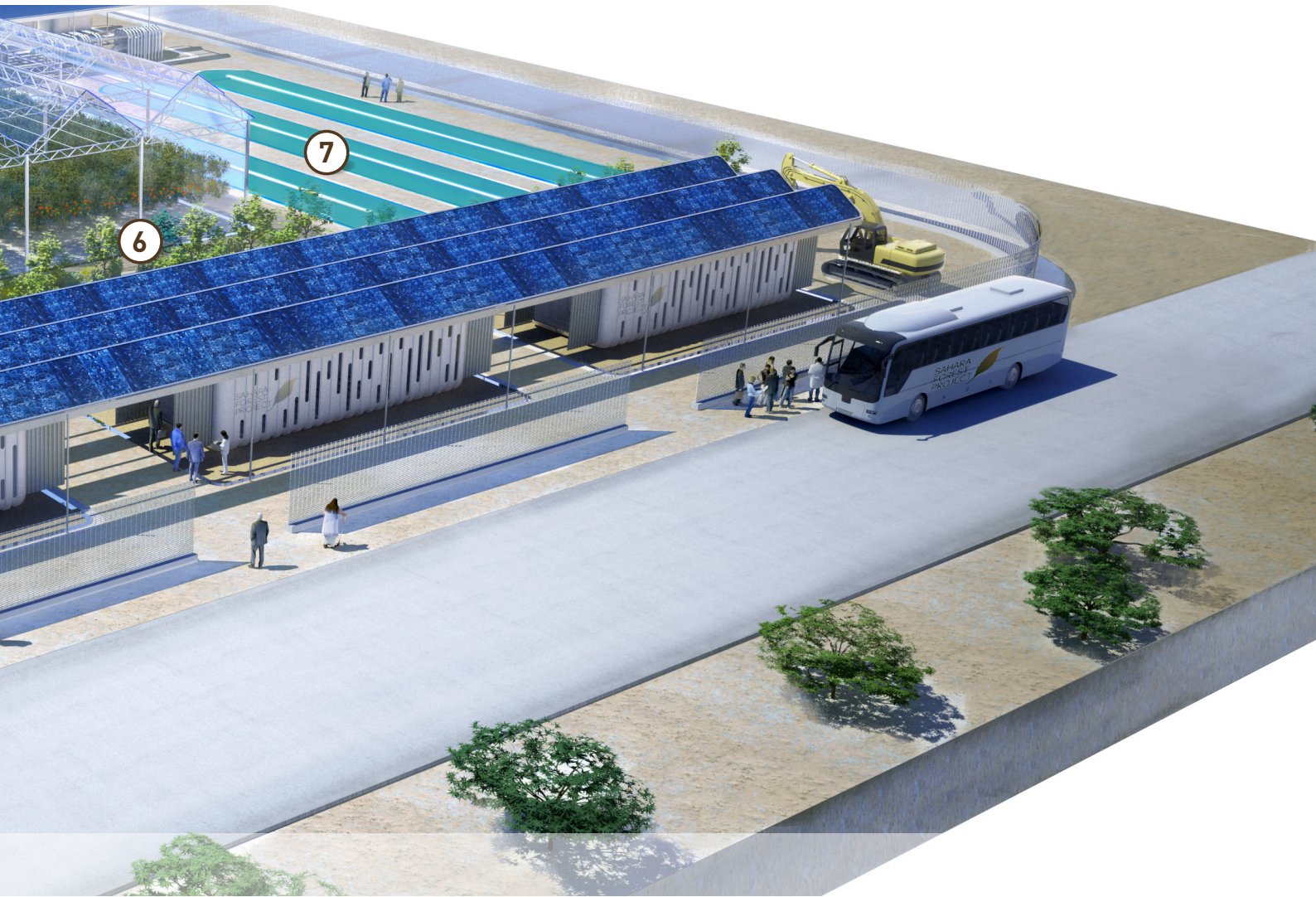
## The Pilot Plant

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**The Sahara Forest Project pilot facility in Qatar will provide a unique research platform to demonstrate and optimize environmental technologies that will enable restorative growth in desert areas around the world.**

1. Concentrated Solar Power
2. Saltwater greenhouses
3. Outside vegetation and evaporative hedges
4. Photovoltaic Solar Power
5. Salt production
6. Halophytes
7. Algae production



This allows for the production of food, water and energy in a system that removes CO<sub>2</sub> from the atmosphere – a truly carbon negative solution. It brings together saltwater-cooled greenhouses, concentrated solar power (CSP) electricity generation, algae cultivation, and desert revegetation technologies for the first time, enabling many technical and scientific firsts.

Bringing these technologies together around a shared saltwater infrastructure will make them each more effective and cost efficient.

The Sahara Forest Project concept optimizes synergies to make restorative growth economically and environmentally profitable. The Qatar pilot will provide the first demonstration of those synergies at scale, and provide a unique research platform to develop and prove new strategies for providing food, freshwater, and clean energy in desert environments.

The work done at the Qatar pilot by the SFP research staff, and by members of its large international network of scientific collaborators, will lay sound scientific foundations for bringing restorative growth to Qatar and to deserts around the world.

# An oasis of green technologies

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## 1. Concentrated Solar Power

A strikingly simple interface will replace the water-thirsty cooling towers of a typical CSP plant with a saltwater cooling system that utilizes greenhouse roofs to dissipate the waste heat from the CSP process. At the Pilot Facility, SFP will demonstrate an innovative greenhouse-CSP cooling system, which enables the low-cost use of saltwater to achieve wet-cooling efficiencies without utilizing precious freshwater resources.

The heat from the CSP mirrors will be used to drive a multistage evaporative desalination system for production of distilled water for the plants in the greenhouse and outside. The waste heat is used to warm the greenhouses in the winter and to regenerate the desiccant used for dehumidifying the air.

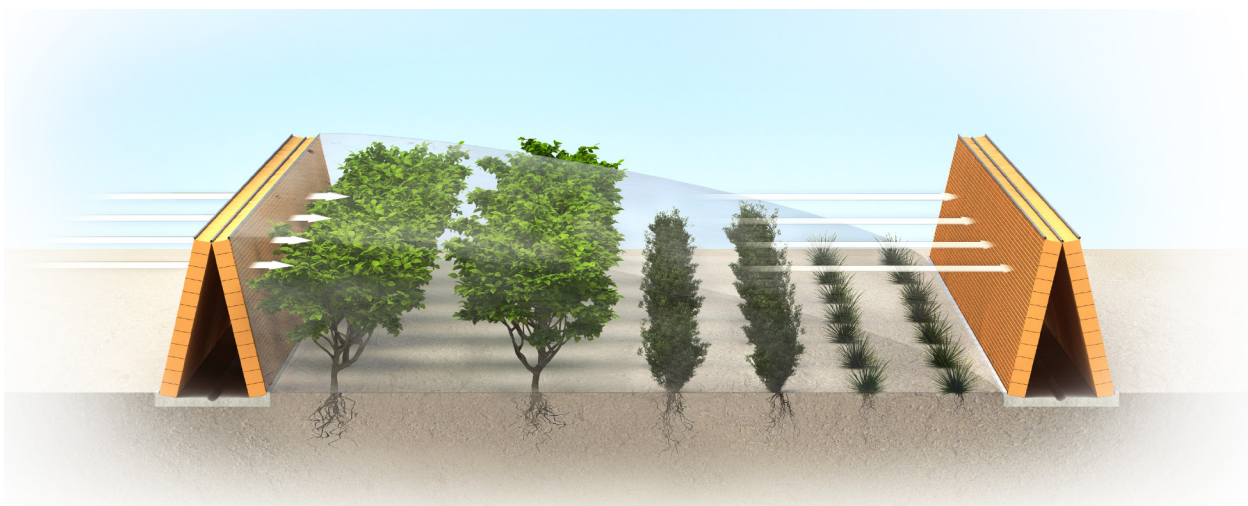
The SFP Pilot Facility will be home to the first fully operational CSP unit in Qatar. It will be used to measure the performance of CSP collectors in Qatari conditions, providing vital information for future larger scale solar power facilities. So too will the Pilot provide the first testing ground to examine the impacts of co-locating CSP collectors with revegetated areas, in which plants and humidifying hedges can reduce the dust levels that can reduce the performance of solar energy systems, and partially protect the valuable CSP mirrors from harsh desert winds.

## 2. Saltwater greenhouses

Saltwater-cooled greenhouses will provide suitable growing conditions that enable year-round cultivation of high-value vegetable crops in the harsh Qatari desert. The greenhouse-structure will consist of 3 bays that will compare the performance of ETFE and polythene roof coverings on the horticultural yield. The cooling system will be an evaporative cooler at one end of the greenhouse. The cool air will be supplied under the plants via polythene ducts to ensure that the cool air is distributed evenly along the greenhouse and at low level. As the air heats up it rises and is expelled via high level openings in the end wall.

The middle bay will have a twin skin ETFE membrane roof that forms a void over the greenhouse. This is linked to an evaporator pad and fan that can use the waste heat from the CSP to evaporate seawater or regenerate the desiccant and produce hot moist air. When the air is passed through the void at night it will cool and the moisture in the air will condense out to give fresh water that can be used for irrigation of the plants.

By using saltwater to provide evaporative cooling and humidification, the crops' water requirements are minimized and yields maximized with a minimal carbon footprint.



Evaporative hedges provides humidity and shelter for a variety of plant species



Test-runs of evaporative hedges in Qatar

### 3. Outside vegetation and evaporative hedges

The water coming from the greenhouse will be at a concentration of about 15 % salinity. To reduce the water content further, the brine will be passed over external vertical evaporators set out in an array to create sheltered and humid environments. These areas will be planted to take advantage of the beneficial growing conditions for food and fodder crops and for a wide range of desert species. New candidate species for use as harvested and grazing fodder for livestock, and as bioenergy feedstock, will be identified and characterized from among native desert plants. The carbon sequestration benefits of various planting and cropping approaches will be measured and compared.

### 4. Photovoltaic Solar Power

The Pilot Plant will be supported by state of the art PV-technology. Dust arresting from the surrounding vegetation and water for cleaning the PV-panels will ensure an efficient electricity generation.

### 5. Salt production

As the water is evaporated from saltwater the salinity increases to the point that the salts precipitate out from the brine. The last stage of this process will take place in conventional evaporation ponds.

### 6. Halophytes

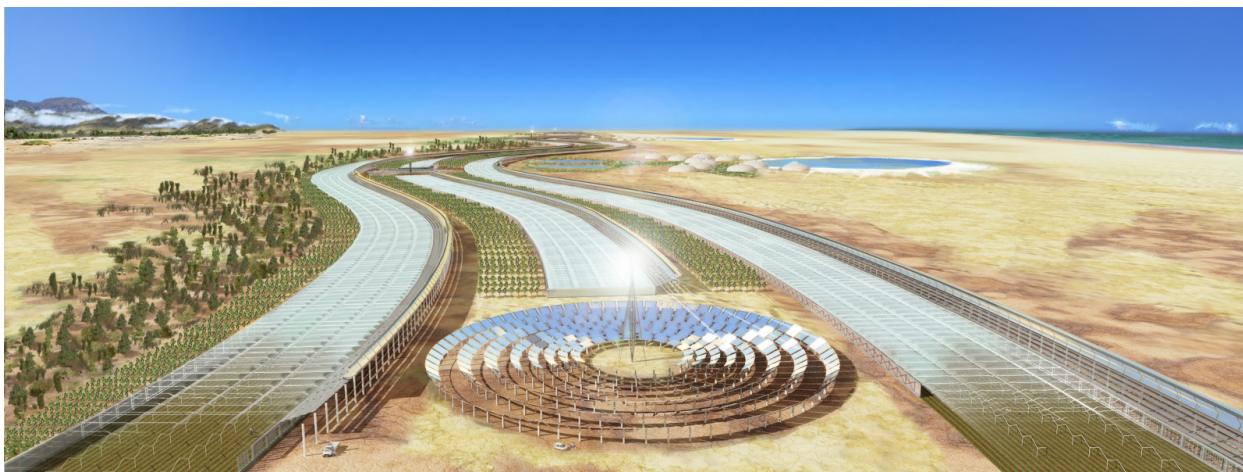
Beyond traditional horticulture and agriculture, halophytes – salt-loving plant species – will be cultivated in saltwater. These hardy plants, often already well adapted to desert conditions, are highly promising sources of fodder and bioenergy feedstocks that can thrive in highly saline environments. However, irrigating with saltwater directly into the soil can cause significant environmental harm. The Qatar Pilot Facility will implement and test a variety of novel cultivation techniques to allow low-cost halophyte cultivation while ensuring no saltwater enters surrounding soil or groundwater aquifers.

### 7. Algae production

A state-of-the-art 50 m<sup>3</sup> algae test facility – the only of its kind in Qatar and the larger region – will enable commercial-scale research on the cultivation of marine algae species native to the Gulf and Red Sea for use as nutraceuticals, biofuels, and as animal and fish fodder. New synergies with the SFP saltwater-greenhouse infrastructure, mariculture operations, and soil remediation methods will be optimized, while cutting-edge research in cultivation and harvesting methods is carried by SFP staff and its team of international collaborators.

# The Sahara Forest Project – too good to be true?

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In 2050 about 9.3 billion people will share our planet. Already today the world is facing intertwined challenges of food, water and energy security, coupled with climate change, desertification and shrinking forests. None of these challenges are without solutions. At the same time it is ever more clear that we cannot afford to pursue responses to one challenge that come at the expense of another. The greatest challenges of our time are closely interlinked and the same must be true for their answers. To borrow the words of Albert Einstein: “We can’t solve problems by using the same kind of thinking we used when we created them.”

Considerable parts of what are now considered desert areas were formerly vegetated. The army of Julius Caesar conquered much of the African territory north of the Sahara, turning forests into farmland. For some 200 years North Africa supplied around two-thirds of Rome’s total grain supply. This resulted in deforestation, increased salinity in the soil and loss of minerals.

In the same way that the extractive use of resources has contributed to the loss of natural vegetation, The Sahara Forest Project proposes to use restorative practices to establish vegetation in arid areas and reverse the trend of desertification. This process of restorative growth will be catalyzed by combining already existing and proven environmental technologies, such

as the evaporation of saltwater to create cooling and distilled fresh water (i.e. in a saltwater-cooled greenhouse) and solar thermal energy technologies. The technological combination in The Sahara Forest Project is designed to utilize what we have enough of to produce what we need more of, using deserts, saltwater and CO<sub>2</sub> to produce food, freshwater and energy.

The Sahara Forest Project proposes to establish groups of interconnected economic activities in different low lying desert areas around the world. The simple core of the concept is an infrastructure for bringing saltwater inland. The saltwater is used to condition the desert air in a greenhouse to create ideal growing conditions for the crops inside. Evaporation of the saltwater at the greenhouse entrance cools and humidifies the dry desert air, creating conditions in the greenhouse that significantly reduce the irrigation requirements of the high value plants grown inside. Some of the water vapor in the greenhouse air will condense on cold surfaces, such as the roof, at night to contribute freshwater for irrigation of the crops.

The saltwater will also be evaporated over outdoor evaporative structures, called “hedges”, to create external spaces with sheltered and humid conditions, aiding re-vegetation of the environment outside the greenhouses.

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The saltwater-cooled greenhouse infrastructure is combined with Photovoltaic and/or Concentrated Solar Power (CSP) electricity generation facilities. CSP systems use mirrors to concentrate the energy from the sun to create very high temperatures, which produce superheated steam that can power a conventional steam turbine. By combining CSP facilities with a saltwater infrastructure, highly beneficial synergies are achieved. Not only will the saltwater be used for cooling of the CSP to cost-efficiently increase power production, but the surrounding facilities and vegetation will also ensure that more sun reaches the mirrors and less dust settles on the reflecting surfaces. Additionally, the waste heat from the CSP-facility will be used to evaporate yet more saltwater for distillation into freshwater, and to provide heating to the greenhouses during cold nights.

By establishing a commercially viable way to bring saltwater into the desert, The Sahara Forest Project works as an enabling technology, creating opportunities for a wide variety of businesses to develop alongside it. Saltwater algae cultivation is one of the most promising future pathways to large-scale bioenergy production, and has key natural synergies with the rest of the Sahara Forest Project concept. Profitably securing an adequate saltwater supply is a major hurdle for many algae facilities. In the Sahara Forest Project, not only can an algae facility use the same saltwater infrastructure – it can use the same saltwater. Much of the outflow from an algae facility is still at salinities of only 5 or 6 %, such that it can be reused in the greenhouses, for CSP cooling, and throughout the rest of the SFP system.

In contrast to most traditional desalinization practices, The Sahara Forest Project operates without emissions of brine back to the sea. As the water is evaporated from saltwater the salinity increases to the point that the salts precipitate out from the brine. The extraction of the minerals from saltwater is an alternative to min-

ing. The largest component is table salt [NaCl], which has many uses in food preparation, road maintenance, and as an industrial feedstock.

A Sahara Forest Project facility will be successful only when it is well integrated with the local communities. In addition to mitigating effects of climate change and contributing to conflict reduction in resource-scarce areas, the SFP facilities will provide employment for both high- and low-skilled workers. Programs and facilities for knowledge transfer and training will be established to ensure that long-term social and economic development opportunities are created.

The Sahara Forest Project is not too good to be true. It is an integrated system designed to harvest technological synergies while minimizing waste. The design is founded on the premise that we must find a more holistic approach to successfully tackle challenges related to energy, food, and water security.

## From vision to reality in Jordan

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In addition to the planned Pilot Plant in Qatar, The Sahara Forest Project is also carrying out projects in Jordan. The Qatar pilot will provide valuable experience and technology optimization that will help accelerate the projects also in Jordan.

In 2011, a Memorandum of Understanding was signed between the Aqaba Special Economic Zone Authority and The Sahara Forest Project AS in Amman, Jordan. The Jordanian Minister for Foreign Affairs, H.E. Nasser Judeh, and the Norwegian minister for Foreign Affairs, H.E. Jonas Gahr Støre, were both present at the signing ceremony to show joint Jordanian and Norwegian support for the agreement.

The agreement commits The Sahara Forest Project AS to conduct three comprehensive feasibility studies in Jordan. The studies are financed and supported by The Norwegian Ministry of Foreign Affairs. The ongoing studies will prepare for the construction of a 20-ha (200.000 sqm) SFP Demonstration Centre, which will serve as a center for innovation, competence building, and demonstration of the economic viability of the SFP concept. The Centre will be located near Aqaba, Jordan. The Aqaba Special Economic Zone Authority will facilitate the necessary land area for The Sahara Forest Project Centre, including a corridor for the salt water pipe running from the Red Sea to the Centre. The Aqaba Special Economic Zone Authority will also assist SFP AS in identifying and securing 200 ha (2.000.000 sqm) for later expansion.

The ongoing studies in Jordan are being carried out by SFP AS in close cooperation with a large number of partners and contributors with diverse backgrounds and expertise. The Sahara Forest Project puts a high priority on its relationships with the scientific and business communities in Jordan and promotes a high degree of knowledge sharing between the various contributors. In-depth knowledge of local conditions, whether they are ecological, social, or commercial, is key to the success of the project. In every one of its undertakings, The Sahara Forest Project designs the SFP concept to best serve the environmental, social, and economic needs of the local communities.



Signing of agreement between the Aqaba Special Economic Zone Authority and SFP in Amman, Jordan

## The collaborators

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### Yara International

Yara International ASA is the world's leading chemical company that converts energy, natural minerals, and nitrogen from the air into essential products for farmers and industrial customers. Today, Yara's global workforce of more than 7300 employees represents a great diversity and knowledge that enables Yara to remain a leading performer in the industry. The company has a global presence with operations and offices in more than 50 countries and sales to more than 150 countries. In 2010 Yara had total revenue of NOK 65.4 billion.



### Qafco

Qafco is a key producer and exporter of ammonia and urea based fertilizer to the international market. Qafco was founded in 1969 and is now owned by Industries Qatar (75%) and Yara International ASA (25%). Through scientific strategic plans and integration of the latest technologies, QAFKO has emerged as the world's largest single site producer of urea and ammonia with an annual production capacity of 2 million tons of ammonia and 2 million tons of urea.



### The Sahara Forest Project AS

The Sahara Forest Project AS is a Norwegian private limited liability company. The purpose of the SFP AS is to create profitable innovation and environmental solutions within the food, water and energy sector. This is achieved by bringing The Sahara Forest Project technology to the market in relevant countries. The Sahara Forest Project AS operates under the Ethical Guidelines for commercial initiatives set out by The Sahara Forest Foundation. The main shareholders are Michael Pawlyn, Bill Watts and Bellona Holding.



### The Sahara Forest Project Foundation

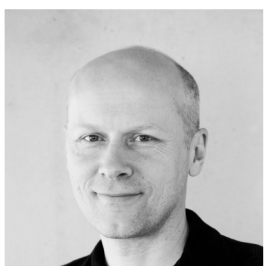
The Sahara Forest Project Foundation facilitates and promotes research, knowledge and the use of technologies which enable revegetation and the creation of new jobs through the profitable production of food, water, biomass and electricity. The SFP Foundation has established a set of Ethical Guidelines applicable to all commercial Sahara Forest Project Initiatives.

## The SFP Board

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**Mr. Bill Watts** studied zoology at Oxford and Stirling Universities before joining Max Fordham LLP in 1980 to be a Consulting building services engineer. He is now senior partner in Max Fordham LLP. Mr. Watts has spent over 30 years designing the environmental services installations in buildings and introducing innovative sustainable ways of making buildings comfortable. More recently, Mr. Watts has also been involved in shaping the wider agenda of energy and resource use in the UK from the point of view of the building user to the national energy supply strategy. He is now involved in developing novel engineering solutions and products to address issues of resource use.



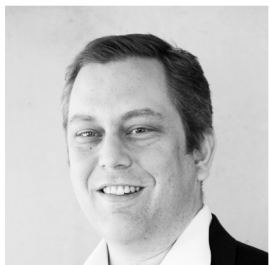
**Mr. Michael Pawlyn** established the architecture firm Exploration in 2007 to focus on environmentally sustainable projects that take their inspiration from nature. Prior to this, Mr. Pawlyn worked with the architectural firm Grimshaw for ten years and was central to the team that radically re-invented horticultural architecture for the internationally acclaimed Eden Project. Mr. Pawlyn widely gives presentations on the subject of sustainable design in the UK and abroad. In 2011 his book 'Biomimicry in Architecture' was published by the Royal Institute of British Architects.



**Mr. Frederic Hauge** is President of the Bellona Foundation, an international environmental organization with more than 70 employees in Norway, Russia, Brussels, Poland and the US. The Bellona Foundation has a strong tradition of identifying and promoting new and innovative solutions to environmental problems. Mr. Hauge is also vice chairman of the European Commission's Technology Platform on Zero Emission Fossil Fuel Power Plants (ZEP) and Board Member of the EU Biofuels Platform. Mr. Hauge has won numerous awards for his untiring efforts for the environment, and Time Magazine has named him a "Hero Of The Environment". In 2011, EU Energy Commissioner Günther Oettinger selected Mr. Hauge as a member in high-level advisory group to the ambitious EU work on establishing a roadmap on how to decarbonize Europe towards 2050.

## The SFP Team

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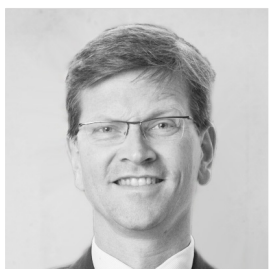
**Mr. Joakim Hauge** is the CEO of SFP AS and holds an MSc in biology from the Centre for Ecological and Evolutionary Synthesis at the University of Oslo. He has broad experience on issues related to innovation and biology in the non-governmental and private sectors, and has previously advised national, EU and international institutions.



**Mr. Kjetil Stake** is the Managing Director of SFP AS and holds an MA in Economics from the College of Europe and a BA in International Economics from The American University of Paris. Mr. Stake previously served as Managing Director for The Brussels Office, an EU public affairs company. He is also an international speaker on EU, Energy and Environment affairs.



**Dr. Virginia Corless** is the Science and Development Manager of SFP AS and holds a BSc in Physics from MIT, and a PhD in Astronomy/Astrophysics from the University of Cambridge. Dr. Corless was previously an AAAS Science & Technology Policy Fellow in the U.S. Senate for the Committee on Energy & Natural Resources working on international clean energy issues.



**Mr. Lars Myren** is the Financial Manager of SFP AS and has an MSc in Electronics from the NTH university and a MIEM degree from the Bocconi university. Mr. Myren previously served as Executive Vice President and CFO of the global packaging corporation Elopak and has 17 years of senior management experience.



**Ms. Maha Mehdi** is the Office Manager of SFP AS and has a Maîtrise in Environment and Urban Planning from the Université Saint-Joseph in Beirut. She has worked with the United Nations Development Programme, the Lebanese Ministry of Environment, and several international organizations and companies specialized in environmental issues and sustainable development.

"This is a gold standard in a day and age where we have a hot and crowded planet, and we need to move towards a low-carbon future fast." - **Olav Kjørven**, Assistant Secretary-General of the United Nations Development Program "The Sahara Forest Project appears to be a very interesting example of the more integrated and holistic kind of thinking that we will need a lot more of in the future to make our energy, water and industrial systems more sustainable." - EU Energy Commissioner **Andris Piebalgs** "It deserves follow-up and attention from private investors, but certainly also partly a public funding system that makes it possible to move ahead." - **Dr. Gro Harlem Brundtland**, Special Envoy on Climate Change, former Prime Minister of Norway, former chair of the World Commission on Environment and Development and Director General of the WHO "A novel combination of technologies that has the potential to turn large areas of desert green, producing commercial quantities of food and energy crops, fresh water, and electricity" - **Science** "That Sahara Forest-thing just blows my mind!" (...) "Fantastic! This draws upon synergies from a range of different technologies" - **Lord John Prescott**, UK Former Deputy Prime Minister "SFP is a pioneering project that reflects the kind of holistic vision and solution that we need to explore so that we can address the interconnected challenges of food, water and energy security. It is about optimizing the whole system rather than maximizing one goal." - **Dr. Dan Kammen**, Chief Technical Specialist for Renewable Energy and Energy Efficiency, The World Bank "A renewable-energy "oasis" slated to be built in 2010 may serve as a proving ground for new technologies designed to bring green living to the desert." - **National Geographic** "A very spectacular and potentially important project on renewable energy, where we try to pool our experience in some adventurous and entrepreneurial approaches to exploring the potential of this country and the solar potential of the Middle Eastern region. Starting in Jordan is really a promising starting point." - **Jonas Gahr Støre**, Norwegian Minister of Foreign Affairs "It may sound like an environmentalist's pipe dream, but giant greenhouses could soon be popping up in some of the world's deserts, producing fresh drinking water, food and fuel." - **New Scientist** "Individually, the various technologies are commercially proved, but excitement stems from using them together for the first time." - **Financial Times** "A project at the forefront of cutting-edge technology." - **José María Figueres** Former President of Costa Rica, Initiator and president of The Global Observatory and Member of the Club of Madrid "Arnold Schwarzenegger stole the show for a while as a star speaker at COP15 (and confirmed that California is the best state in the world), but the Sahara Forest Project remains by far the most original initiative to combat climate change." - **Gulf News** "Sahara Forest Project is an ambitious attempt to use concentrated solar power and seawater-cooled greenhouses to produce renewable energy, crops and water. Its success thus far has inspired new feasibility studies in Jordan and Qatar." - **The Economist** "Projects like this, like the Sahara Forest Project, combine a number of challenges into a solution, and we know that many big companies and investors are increasingly interested in projects like this, because they want to be investing in opportunities of the future." - **Paul Simpson**, COO of CDP Water Disclosure. Board member of Ethical Investment Research Service (EIRIS) and former Director of the Social Venture Network "The Sahara Forest Project proposes building CSP plants below sea level (the Sahara has several such depressions) so that seawater can flow into them and be condensed into distilled water for powering turbines and washing dust off the mirrors." - **TIME Magazine** "The idea sounds too good to be true: vast greenhouses-cum-power-plants that sit in the desert, producing food, energy and fresh water. Yet that is the proposed design for the Sahara Forest Project." - **Telegraph** "Seawater greenhouses to bring life to the desert. The planned project would use solar power to evaporate salt water, generating cool air and pure water thereby allowing food to be grown." - **Guardian**