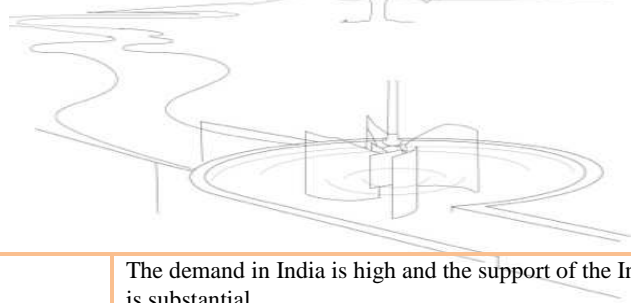


Green Economy for the developing world

An Investment with high social, ecological and economic impact

<p>Summary</p>	<p>The demand for low cost, sustainable and renewable energy in the form of electricity in emerging and developing countries is very high. The potential for micro hydro power plants to fulfil this demand is substantial. Verde Renewables AG will fill a large part of this demand and, thereby, create a high social, ecological and economic impact. During the first stage of the business development, Verde will focus on getting hundreds of plants built in India through its franchising system, and create the basis for growth in other developing countries. Each 20 kW plant will generate enough electricity to supply 60 families in rural India. The business plan foresees to bring affordable electricity to 750 families by 2018, increasing this number to more than 60'000 by 2024.</p> <p>The venture will be profitable in 2018.</p>
<p>Background</p>	<p>Access to modern energy is essential for the provision of clean water, sanitation and healthcare and for the provision of reliable and efficient lighting, heating, cooking, mechanical power, transport and telecommunications services. It is an alarming fact that today billions of people lack access to the most basic energy services. World Energy Outlook 2015 shows that 1.2 billion people are without access to electricity and more than 2.7 billion people rely on the traditional use of biomass for cooking, which causes harmful indoor air pollution.</p> <p>Private initiatives that are economically viable are needed to achieve the Sustainable Development Goal of the United Nations to "ensure access to affordable, reliable, sustainable and modern energy for all". The business model of Verde Renewables AG is such an initiative. It aims to first focus on getting electricity to some of the 237 million people in India that are without electricity.</p> <p>Verde is planning to implement a business model over the next few years that will allow the Vortex Micro-Hydro-Power technology developed and perfected in Switzerland to be multiplied first in India and then in as many countries of the developing world as possible.</p>
<p>Business Model</p>	<p>Verde Renewables AG with its business partners will commission Vortex Micro Hydro Power plants in large numbers and sustainably create a high social, ecological and economic impact in as many countries of the developing world as possible.</p> <p>Verde chose India to start the venture for the following reasons:</p> <ul style="list-style-type: none"> - The Indian culture has an inherent entrepreneurial drive which increases the success potential of a franchising system - The cost structure of the Indian economy allows Verde to set-up the procurement of the components needed in the construction of standard 20 kW Micro-Hydro-Vortex-Plants at prices which are economically feasible also for other developing countries. - There is a large potential and demand in India. A mission being launched to promote small hydro projects in the form of a „National Mission on Small Hydro“ with large subsidies being paid to buyers of such plants, a joint initiative of the central Government of India and State Governments, is a clear indication of this. <p>The following steps are to be implemented:</p> <ul style="list-style-type: none"> • To ensure low cost to make the technology affordable to low income population, all components will be sourced in India. • To maintain the Swiss quality, and thereby ensure operational dependability and low maintenance cost, the production and assembly of the electricity producing components will be done centrally at Verde's facility in Vadodara, Gujarat, India. This also creates the means to sell the components throughout India as well as export to other developing countries. • To raise awareness within India and create a large demand, as well as getting the full support of the Government to secure required licenses and building permits, as well as possible subsidies, two 20kW showcase plants are being built. The construction of the first plant is now in progress in Uttarakhand. MoU's with the Government have been signed and subsidies committed. • The revenue will be generated through the sale of the electricity producing components (80% of the value) to independent project developers (franchisees) throughout India. The franchisees receive training at Verde's training facility.
<p>USPs</p>	<p>The Micro Hydro Power plant technology, perfected in Switzerland, is easy to install & maintain, and is ideally suited to supply affordable electricity off-grid to rural villages in developing & emerging countries.</p> <p>The existing manufacturing facility of Verde India in Vadodara, Gujarat has established design, engineering, manufacture and supply capability in delivering control & automation projects as a partner of Honeywell. Through this in-house strength, Verde is perfectly positioned to deliver the main components, including the control panels.</p>



	<p>The demand in India is high and the support of the Indian Government to install decentralized small hydro power plants is substantial.</p> <p>The leveraged cost of electricity from Vortex Hydro Power Plants built in India (3-5 US Cents/kWh) is substantially lower than from Solar panels (12 -15 US Cents/kWh), or Diesel generated (25 – 30 US Cent /kWh)</p> <p>The unique combination of Swiss technology provider, a track record of Verde in India with >100 renewable energy projects implemented in India over the last 10 years, and a close working relationship between the Swiss and Indian partners of more than 10 years.</p>																					
<p>Economics</p>	<p>The main revenue volume will be generated through the sale of electricity producing components to franchisees. The main cost factors in 2016 and 2017 are the construction of the two showcase plants, the installation of the assembly line at the Verde facility in Gujarat and market development. Not taken into account is any growth potential outside of India.</p>	<p>Profitability</p> <table border="1"> <caption>Profitability Data (in '000 CHF)</caption> <thead> <tr> <th>Fiscal Year</th> <th>Profitability</th> </tr> </thead> <tbody> <tr><td>FY15</td><td>-100</td></tr> <tr><td>FY16</td><td>-150</td></tr> <tr><td>FY17</td><td>-100</td></tr> <tr><td>FY18</td><td>-50</td></tr> <tr><td>FY19</td><td>100</td></tr> <tr><td>FY20</td><td>200</td></tr> <tr><td>FY21</td><td>400</td></tr> <tr><td>FY22</td><td>800</td></tr> <tr><td>FY23</td><td>1800</td></tr> </tbody> </table>	Fiscal Year	Profitability	FY15	-100	FY16	-150	FY17	-100	FY18	-50	FY19	100	FY20	200	FY21	400	FY22	800	FY23	1800
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<p>Growth Potential</p>	<p>The expansion of the business model to Congo (DRC) and Peru is already lined up. Relationships with trusted private partners and Governments in DRC and Peru have already been established, and the next steps agreed.</p>																					
<p>Technology</p>	<p>The Swiss Vortex Micro Hydro Power Plant was awarded the Swiss Watt d'Or price. The first operational plant in Switzerland was christened by the world famous renewable energy pioneer and co-founder of solar impulse, Bertrand Piccard. The plants allow an electric power production of 1-50kW. They are designed to be located on a river close to a village which does not have constant energy supply. The water runs through the inlet sewer into a circular basin with a central drain. The resulting water vortex powers the rotor. Above the rotor, a generator transforms its movement into electricity. All required components for the power plant are sourced and assembled locally in India</p>																					
<p>The Team</p>	<p>Highly experienced entrepreneurs and engineers from Switzerland and India make up the core team of this project. The combination of Swiss and Indian team members ensures the required technical knowhow, integration in the local economy as well as good access to local government, a keen understanding of cultural differences and a sense of urgency for this topic. The Indian team members have been working very closely with the Renewable Energy Agencies in India, both at the Central and State Government level.</p>																					
<p>Valuation of Verde Renewables</p>	<p>The value of the company consist on one side of the net present value of the conservative income outlook, the value of the licensing agreement with the technology provider, the factory in Gujarat which is in place, the training facility already up and running, the initial capital of the company, the already established business contacts in India and the excellent relationship with Government, as well as the business idea. Based on these factors, the value of the company is in excess of CHF 2.0m. Not taken into account in this calculation is the social, ecological and economic impact the venture will have on the rural population in the developing world.</p>																					
<p>Offer to Investors</p>	<p>Following the initial capitalization of the company with CHF 100'000 in 2015, we are now aiming for a capital increase of CHF 500'000 to be able to implement the business model. The offer to investors is a 20% share in the company for a capital contribution of CHF 500'000. A possible exit scenario for investors will be a sale of their shares to second stage investors in 2018 with an expected upside of 50%. At that time a further capital increase is planned.</p>																					
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