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## **Climate SHAPE : Vision and Project**

**Project Name: Green Taxis Initiative  
Hub: Zürich, Switzerland**



# Our Vision

The Green Taxis Initiative aims to increase the acceptance of electric mobility through the introduction of electric taxis in various cities throughout the world. We believe that taxis are a suitable way to make people more aware of the advantages of electric mobility. The idea is to work together with various different parties through a multi-stakeholder approach, including taxi companies, utilities, government officials, and local companies.

[http://greentaxis.strikingly.com/;](http://greentaxis.strikingly.com/)

<http://www.weforum.org/news/global-shapers-launch-zurich-s-first-zero-emission-taxi-fleet>



# The Problem & The Context

The technology for electric cars is mature and the prices have come to a reasonable level. Despite these facts the penetration of electric cars is still at a very low level. We want to change this, by proving that electric cars even in a high intensive use like taxis are a preferred choice and work well over time. A major concern is still the range anxiety of electric cars, but with a network of fast charging stations this problem can be solved.

Carbon emissions are a critical factor for climate change. Hereby personal transportation is a main driver for the increase of carbon emissions. By replacing conventional cars with electric cars, which are exclusively charged with renewable energy, these can be reduced. As a first step it is important to make more people accustomed with electric mobility and reduce their concerns like range anxiety. Using taxis can be a very efficient way in this regard. The entrance barrier is rather low and the taxi driver can act as an ambassador for electric mobility. Currently, due to the energy transition the whole system needs to reflect the new requirements. Electric cars can play a vital role hereby, by acting potentially as a huge energy storage



## **Idea**

The Green Taxis Initiative will motivate taxi companies to use electric taxis. In line with the spirit of the World Economic Forum, we focus on a multistakeholder approach: besides involving the taxi companies and drivers, we are seeking the support of local companies, car manufacturers, municipalities, utilities and the general public. Companies with offices in and around Zurich are the most important customer group for taxi companies. We motivate these customers to commit to use preferential electric taxis. So far companies like UBS, Swiss International Airlines, Julius Bär, Swisscom, Coca Cola and IWC have entered into this commitment. This gives the taxi company and the individual drivers a direct incentive to join, as their turnover grows. Further we show, the drivers that despite the higher initial prices the total costs of ownership for an electric car is actually lower.

## **Duration**

The project does not have a fixed time frame, but rather focusing on achieving the predetermined milestones. During this period the participating taxi companies should continuously take over more responsibility, in order to reduce the required involvement of our project team.

## **Expected Outcome**

Significant percentage of all taxis in Zurich are electric; reduced emissions due to the use of electric taxis, which are charged with renewable energy; increased acceptance from the local community for electric cars; less noise from cars within the city.



## Soft

Carbon emissions are a critical factor for climate change. Hereby personal transportation is a main driver for the increase of carbon emissions. By replacing conventional cars with electric cars, which are exclusively charged with renewable energy, these can be reduced. As a first step it is important to make more people accustomed with electric mobility and reduce their concerns like range anxiety. Using taxis can be a very efficient way in this regard. The entrance barrier is rather low and the taxi driver can act as an ambassador for electric mobility. Currently, due to the energy transition the whole system needs to reflect the new requirements. Electric cars can play a vital role hereby, by acting potentially as a huge energy storage.

Despite the fact that the informational campaign has not started in its full extent yet, we have seen many young people becoming excited about electric mobility and wanting to become more involved in the fight against climate change. According to our experiences so far, young people have been significantly more open to electric mobility.

## Hard

Our aim is to have 15% of all taxis electric in Zurich, as stated in the news release from January <http://www.weforum.org/news/global-shapers-launch-zurich-s-first-zero-emission-taxi-fleet>.



**Project Manager:** Otto von Troschke

**Project Team:** Nicola Forster, Simon Muntwyler, Andrea San Gil, Yuito Yamada

## Grant Spending:

<b>Budget</b>	<b>CHF</b>
Legal fees for building permits for the fast charging stations	5'000
Information material (within the electric taxis)	3'000
Marketing Campaign (incl. website, information material, etc.)	7'000
Green Taxis Initiative Event	6'000
Launching costs for internationalization (CHF 3,000-4,000 for five hubs for local events and infrastructure)	17'500
Green Taxi Show Car (leasing for 12 months, including insurance)	5'040
<b>Total (50,000 USD = ca. 44,863 CHF)</b>	<b>43'540</b>



## Additional Information & References

The project was initially presented to the public during the Annual Meeting in Davos 2013 with Carlos Ghosn, CEO Renault-Nissan. Since January 2014 the first electric taxis are driving on the roads of Zurich. Prof. Schwab was our first passenger. iTaxi is the first taxi company to support the project. Now it is time to scale the project up locally, focus on the information campaign on electric mobility and role the project out in other hubs around the world.

The WEF could provide a platform in order to further promote the project and therefore make more people aware of the advantages of electric mobility. Further, it would be great if "Green Taxis" could be used as a shuttle during the Annual Meeting 2015.

So far the financial support we have received was exclusively dedicated to build up the fast charging infrastructure for the taxis. As a next step we want to start the information campaign about electric mobility. Therefore, we will require some financial resources. Additionally, we want to set up an efficient infrastructure in order to make it simple for other hubs to join the project, work on the implementation of electric mobility in their local communities and scale it up fast.



# Climate SHAPE : Vision and Project



**Project Title : Power to Change  
Hub and country: Tunis, Tunisia**





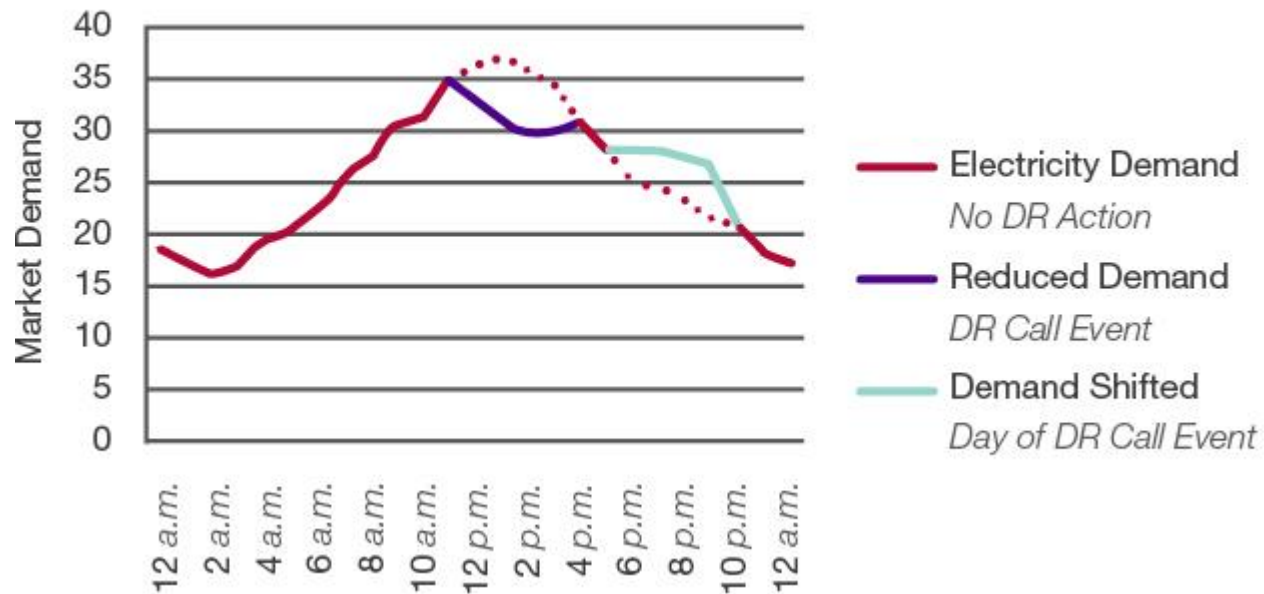


# Our Vision

- Energy generation is one of the largest sources of CO2 Emissions
- For a more positive climate future, our vision is:
  - To meet the growing demand for energy, work on reducing the demand of energy by using the internet of things, rather than generating more energy
- When we reduce one unit at the endpoint, we reduce nine units at the generation plants

Tunisia and most African countries suffer of electricity shortages during hot periods due to Air conditioning consumption, which accounts for 60% of the overran demand. Tunisia produces in average barely 90% of its electricity needs. The problem is that we are unable to manage high seasonal demand (wish causes many problems on Hospitals, oil importation, massive production investments, political turmoil).

DR Reduces Critical Peak Demand



The idea is to work on reducing the demand by involving the end user measuring some targeted equipment and sending him some advices and rewarding his commitment (eg : if we ask somebody to cut his air conditioning system during 10 minutes, it doesn't really affect his life due to building thermal inertia, but we save 90 minutes from a plant perspective and we can reward him with free energy when we have higher production then demand).

We already collected a list of top 100 of energy consuming individuals in Tunisia and by reducing their bill by 5% will be an important argument to deploy 10K users in order to have 1 to 2% of overall energy reduction.

Investissement  
Mustapha Kamel Nabli opposé aux mégaprojets immobiliers «made in Golfe»

**DIRECTINFO**  
L'information de dernière minute 24/24-7/7

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POLITIQUE SOCIÉTÉ ECONOMIE INTERNATIONAL INSOLITE TECHNOLOGIE SPORT CULTURE

**Tunisie – Coupures d'électricité : La STEG s'explique**

Par : Maha Ouelhazi | 19 juil 2012 | 20 h 00 min | Mots-clés : Actualité, Electricité, Entreprises, STEG, Tunisie,



Les coupures d'électricité qui sont survenues, ces derniers jours, ont provoqué la fureur des Tunisiens, incombant la responsabilité sur la Société Tunisienne de l'Electricité et du Gaz (STEG). Mais celle-ci a une autre explication et indique que ces coupures sont dues à une augmentation spectaculaire de la consommation, dépassant le seuil maximal toléré.

<http://directinfo.webmanagercenter.com/2012/07/19/tunisie-coupures-delectricite-la-steg-sexplique/>

## Objective

- The end user can monitor his consumption from anywhere in the world, create rules and get alerts and notifications
- We manage a device platform to monitor demand and supply launching mobilization actions regarding the energy situation and trying to save maximum energy (avoid forgotten devices, detect unusual usages...)
- The idea is to setup a mobilization tool impacting the energy demand and using social networks and connectivity to have a strong commitment.

## Description

- A pilot run with a new innovative device (a smart plug with embedded infrared sensor wish will allow us to monitor air conditioning energy consumption and can control up to 5 IR devices (TV, air conditioning, HI FI, Thermostat..). The device will be connected through Wifi in connected homes (the most consuming homes)
- Devices will be giving for free to a first group of users to order to validate the case then will be launching a larger implementation in partnership with a local telco and utility.
- Duration: 1 year pilot at national level



## How it works

- The Smart Plug lets you turn electronic devices on or off from anywhere inside--or outside--the home. The Smart Plug uses the existing home Wi-Fi network to provide wireless control of TVs, lamps, stereos, air conditioning. End user will be able to turn that device on or off using smart phone or tablet, schedules devices and control them remotely using a mobile Internet connection.



- **Hard impact:**
  - Reduction of energy demand is directly linked to the carbon emissions and climate change
- **Soft impact:**
  - Engagement of youth on their energy use, and the ability to shape their own climate future, using smart phone and social networks (more than 60% of our population)
  - Learn which scenarios impact people
  - How deep the change in behaviour can go
  - A better segmentation of the targeted population
  - Quick wins to enlarge the deployment
  - How much savings can be obtained

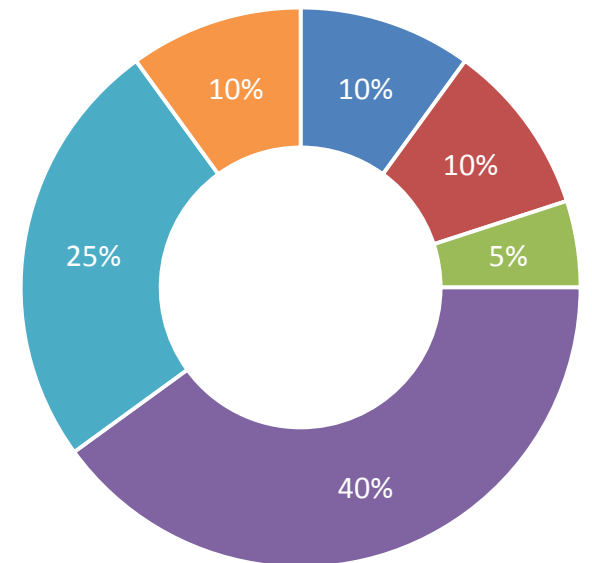


**Project manager:** Amine CHOUAIEB

**Project team:**

- Ali Mnif
- Alia Mahmoud

## Total funding



- Device customization
- IT customization
- IT deployment
- Pilot run
- Mobilization
- Final report

## **The grant will be used for four main aspects :**

- Device customization : ordering a specific device regarding Tunisia specificity (NRE)
- IT customization : adapting the user interfaces for individuals and grid managers
- IT deployment : deploying servers and managing scalability
- First 100 pilot run : hiring individuals and deploying devices
- Mobilization actions and feedback meetings with the end users
- Final report and utility/telco commitment



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## Climate SHAPE : Vision and Project



Project Title : Kabadiwalla Connect  
Hub : Chennai Hub, India

[www.kabadiwallaconnect.in](http://www.kabadiwallaconnect.in)



- Our vision for an equitable and sustainable climate future consists of the following:
  - **Cities driving change:** Cities pioneering and driving climate change awareness, mitigation and adaptation strategies- especially in the Global South.
  - **Global Climate solutions need to include local contexts:** Innovation in climate mitigation and adaptation strategies that are informed by hyper-local and nuanced experiences of different cities in the Global South.
  - **Converting the Global Narrative to fit the local narrative:** Integration of climate mitigation and adaptation strategies into urban planning and urban governance initiatives by translating climate change narratives of global threats into narratives of local vulnerabilities in cities of the Global South.
- Our hope is that the Kabadiwalla Connect Project becomes a focal point that connects all three aspects of this vision to positively impact Chennai city, and in time provides a road map that can be adopted by other Indian cities and cities of the Global South.





# The Problem & The Context

- **The generation of Municipal Solid Waste (MSW) is over-riding the population growth rate in all mega-cities in India.** In Chennai, the population grew by 21% between 1991 – 01 while waste generation grew by 61% between 1996 – 02.
- **Almost 3/4th of the MSW generated from urban India is collected and disposed off in non-scientifically managed dumping grounds** - In Chennai 4500 metric tons of waste is generated every day and Chennai's landfills are fast reaching maximum capacity.
- **Kabadiwalla** – Scrap dealers who go around the city to collect wastes (utensils, plastic bottles, newspaper etc) for a price and sells it for a profit
- **There is a robust 'informal' economy of traders of recyclable waste materials and we can piggy back on this eco system to address this problem.** The ecosystem mainly consist of waste pickers, scrap dealers (Kabadiwallas), and wholesalers traders. Their main incentive is financial profit- waste pickers collect materials, which they sell to kabadiwallas. The Kabadiwallas sell the materials to specialised wholesalers, who in turn sell the materials to recycling factories. Together, these traders form an important informal ecosystem



## **Idea:**

**The Kabadiwalla Connect Project** aims to leverage IT & Mobile technologies to harness the power of the circuits of the existing informal waste economy to ensure that communities living in Indian cities send less waste to the landfill. The project involves three things

- 1. Identifying and Mapping the kabaddiwallahs in Chennai**
- 2. Developing an online platform along with a mobile app that does the following**
  - i. Connects residents/commercial establishments to kabaddiwallahs
  - ii. Create a marketplace for designers who can work with kabaddiwallahs to create products out of these waste
- 3. Creating awareness about the platform in Chennai**
- 4. Charge a transaction fee for all the stakeholders to make it sustainable**

## **Project Duration:**

Kabadiwalla Connect is a long-term sustainable project with annual milestones. It is modelled along the lines of a social enterprise, with particular revenue streams that can make it sustainable and scalable. So in this sense we hope to make it self-sustaining.

## **How will the funding be used?**

- Develop the online platform along with mobile app
- Design products using waste to demonstrate what can be done
- Data Collection



- **Hard impact:**

1. Reduction of waste sent to landfills by **30% to 50%**
2. Reduction in co2 and GHG emissions from landfills by **25% to 40%**
3. Increase in the network of the kabadiwalla ecosystem to receive more waste from residents, business and industry by **25% to 40%**
4. Increase in the number of residents that compost by **20%**

- **Soft impact:**

- The issue of waste is a perfect entry point because it is already an issue that has a lot of traction in Indian cities. Waste management in the city is an issue that the youth are very passionate about, and talking about waste allows us to tap into this large group of people who can take action and drive impact.
- A design collective that drives innovation in making products using material sourced from local kabadiwallas. In the first year, we hope to build a 'Kabadiwalla Connect' brand that sells some simple products out of post-consumer waste.



**Project Manager:** Siddharth Hande **Project Team:** Gullika reddy & Bhairavi Prakash

## **Partners:**

### **1. Leverage student network to collect and map data**

- i. Worked with 120 students from the environment club at the Sri Venkateswara College of Engineering, Chennai
- ii. Conducted a pilot mapping exercise in Bangalore

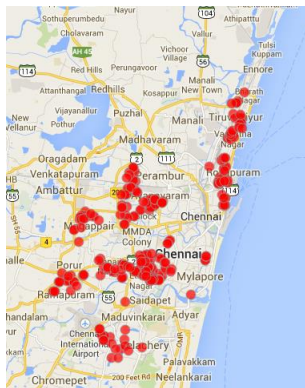
### **2. Design Partners:**

We have initiated conversations with students from the National Institute of Fashion Technology in Chennai and the Srishti school of art, design and technology to create a design collective that can drive the making of products from material sourced from kabadiwallas.

### **3. Research Partners:**

We have partnered with the Indo-German Centre for Sustainability in IIT-Madras and Gubbi Labs from Bangalore to help us develop a research framework to understand the impact of the kabadiwalla ecosystem in Chennai and Bangalore.

## Kabaddiwallahs Mapped so far



Student Volunteers

## Media Coverage

**THE HINDU**

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CITIES > CHENNAI > INFRASTRUCTURE CRIME SOCIETY LEISURE HEALTH EVENTS COLUMN

CHENNAI, February 10, 2014

Updated: February 10, 2014 11:32 IST

### Students to map Chennai's scrap dealers

Nouveau: Maserati Ghibli - Découvrez dès maintenant! Ceci à un prix remarquable. [www.maserati-testdrive.ch](http://www.maserati-testdrive.ch)

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waste

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A survey to map kabadiwallahs (scrap dealers) across the city will soon improve the coordination between such dealers and residents, and eventually reduce waste going to landfill.

As part of this joint project organised by Global Shaper, a youth wing of the World Economic Forum, and Care, an eco club run by students of Sri Venkateswara Engineering College, an orientation programme about the survey which will be undertaken in about two weeks from now, was conducted for 450 students on Sunday.

**THE NEW INDIAN EXPRESS**

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RESERVEZ AVANT LE 26 JUIN 2014 15% AVIS

Ask Prabhu

2 crore profiles

Register NOW

Waste management

Chennai

Cleaning Up With 'Kabadiwallah' App

Varun Gunaseelan, Siddharth Hande and Krishnakumar Saksudramanian

In an attempt to help you find a kabadiwallah or waste dealer near you, a city hub of a global community has created an Android app that will help you do that.

Though 'Kabadiwallah Connect' will have details and contact information of the shop in your neighbourhood, the service initiated by the Global Shaper Chennai hub isn't just to connect you to a waste dealer - it's about putting a number on just how much recyclable waste our city is throwing into garbage bins.

"In Chennai, we estimate that per person waste generation is about 102 kg a day and also 85% is generated from households. The thing is, most of the waste can be recycled or upcycled and we believe that if people can contact a kabadiwallah, the waste output will come down quite a bit," said Siddharth Hande who works with the group.

As a first phase in finding out how much waste is actually upcycled by the waste market, 100 student volunteers from Sri Venkateswara College of Engineering will be fanning out across 40 areas in Chennai and attempt to map the waste market. They will collect details about the waste market, what kind of stuff they take, how much they have in general and also in contact details. This can be used to generate a number, which will be used to begin a debate on how big our trash problem is and what we're going to do about it," he added.

As part of the mapping drive, the student volunteers were given the 'Kabadiwallah Connect' app and were briefed about the project at the Gandhi Nagar club on Sunday morning. They will be going soon by zone and updating details and pictures for future reference from their android phones. Once the first few drives, starting February 22, are done, Global Shapers Chennai is looking at holding a seminar to discuss how large the waste issue choking our city's landfills, really is and then look at change measures.

**THE TIMES OF INDIA** Tech News

THE NEW MASERATI GHIBLI FROM CHF 73'550.-

RELATED KEYWORDS: Corporation Of Chennai | APP

### A mobile app to help find your nearest scrap dealer

Pratiksha Ramkumar

CHENNAI: In a bid to make source segregation of waste easier for households, a group of youngsters plans to create an app that shows the kabadiwallahs, or scrap dealers, present in various parts of the city. Residents can then use the app to find a scrap dealer in their area who would visit their house and pick up recyclable waste.

Kabadiwallahs traditionally visit houses to buy recyclable waste like paper, plastic bags, plastic bottles, glass bottles, thermocol boards and cardboard boxes. "Kabadiwallahs have been in the business for generations, so they know how to pick out items that can be reused, including electronic and metallic waste," says Siddharth Hande, from Global Shapers Community, which will launch the mobile app along with Sri Venkateswara College of Engineering's eco-club.

However, many households, especially those with non-Tamilians who've recently moved to the city, neither know the existence of these kabadiwallahs nor ways to contact them. The kabadiwallahs usually ride their bicycles along the road shouting 'paper', 'bottle' or 'clothes' to announce their arrival. Those new to the city don't know that it's the scrap dealer's call," says Hande.

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## **Climate SHAPE : Vision and Project**

**Project Name: Square Banana  
Hub: Melbourne, Australia**



# Our Vision

\*Please refer to the infographic for the Melbourne Shapers Hub vision of our climate future in the additional information section.

Our vision seeks to address the **culture, thinking and decisions made around food waste** through an innovative solution that brings together consumers and producers.

To make this vision a reality, disruption and transformation is required in the way we think, speak and act including:

- Deeply embedding **sustainability ideals** into people's thinking and actions; as business as usual is not a feasible long term solution
- Collaboration amongst communities, business, government, nations** is required
- Innovation**, creativity and imagination needs to be supported and fostered
- A **holistic**, multi-layered, interconnected solution is required



# The Problem & The Context

Our world is facing a food crisis. Food prices continue to climb and 1 in 8 people live in hunger. Yet, in the face of this, food waste is enormous with over one third of food produced in the world going to waste, at a direct economic cost of over \$750 billion (Food and Agriculture Organization, United Nations).

Food is wasted along the value chain, however the greatest waste occurs at harvest and production (FAO, UN). Within harvest and production, up to 30% of produce that is wasted in the UK and US is perfectly and safely edible but not sold to retailers as it does not meet cosmetic standards e.g. colour or size requirements (Institution of Mechanical Engineers, Global Food Report).

We have chosen to address this problem because it is simply unsustainable to keep wasting food at the rate we currently are. With the global population estimated to exceed 9.5 billion by 2075, we need to ensure food is available to feed all these people. From a social, environmental, and economic perspective, it is imperative that we act now to promote sustainable ways to reduce waste and increase the accessibility of food.





## Idea

Square Banana connects producers of food with consumers through an e-commerce platform or 'online farmers market' through which producers will be able to sell food that will otherwise be thrown away at a discounted rate to customers.

## Duration

**~1 year of incubation by Shapers**, square Banana will become an independent organisation/business supported by the Hub. The project has potential to grow over time and scale both to different regions and countries, and to different parts of the supply chain (e.g. selling food from restaurants/cafes that would otherwise be wasted).

## Expected Outcome

The desired outcome is for a high, and increasing volume of food to be sold through the platform, that would otherwise be wasted.

Moreover, the solution will mobilise young people by providing a platform for them to help reduce food waste in the world and promote healthy eating. Furthermore, the platform also provides a tool through which young people can become more educated and socially aware of the consequences of their actions around food waste.



## Hard:

### Specific targets:

- At least **400,000 kgs** of produce sold by 2016 that would otherwise be wasted
- At least **15 of Victorian farmers** groups working with us by end of 2016
- At least **30% of the target customer group** using our platform regularly by the end of 2016
- Project **expanded into New South Wales, South Australia and Queensland** with at least 5 farmer groups in each of these states

\*Note: Targets to be refined during research/scope phase (refer business plan) and are to be reviewed regularly

## Soft:

- Water waste will be reduced -- vast quantities of water are wasted in global food production, with about 550 billion cubic metres of water used to grow crops that never reach the consumer (IME, Global Food Report).
- Research has shown that emissions can be cut by at least half by opting for delivery of food to one's doorstep (University of Washington). Therefore, by creating a solution where food is delivered, consumers do not need to drive to/from grocery stores, or markets as frequently, thereby reducing emissions and directly impacting climate change.
- The website and mobile app platforms will also provide information and educate consumers about the environmental and social benefits of purchasing produce that would otherwise be wasted. This information seeks to not only raise awareness about waste issues amongst consumers but to spark broader conversations on how people can live more sustainably.



# The Team & Structure

**Project Manager:** Shruthi Vijayakumar

**Project Team:** Linh Do, Fiona Lawrie, Hugo Lamb, Rangi de Silva, Gemma Cooper, Alan Wu, Phil Kingston, Tim Goodwin, Julia O'Shea, Pete Saunders

**Other groups:** Partnerships will also be established with non profit organisations working to address hunger in the community such as:

- The City Mission, School Breakfast Programs, Soup Kitchens etc. Farmers will be encouraged to donate a proportion of produce to these groups. In return, these groups will promote the platform to their beneficiaries who fall in our target customer market.
- The logistics will be coordinated by another company operating in food delivery services or a transport and logistics company. Examples of other companies who could coordinate logistics include Aussie Farmers Direct (<http://www.aussiefarmers.com.au/>) who sell and deliver high quality produce from farmers to consumers, or organize food provider Ceres Fair Food (<http://www.ceresfairfood.org.au/>) who deliver seasonal organic produce to consumers homes.
- Partnerships would be set up with these providers where the partner company would enjoy a share of revenue in return for providing the logistics and transport infrastructure. Initially the platform will operate online, however in future there is potential to sell the produce in stores. This will typically be with retailers with a social mission.

**\*please read our detailed Project Plan under the additional information section of this presentation**



# Additional Information & References

## **Detailed Project Plan:**

[http://www3.weforum.org/docs/IP/2014/ENVI/BusinessPlanClimateSHAPE\\_MelbourneHub.pdf](http://www3.weforum.org/docs/IP/2014/ENVI/BusinessPlanClimateSHAPE_MelbourneHub.pdf)

## **Infographic for Project Vision:**

<http://www3.weforum.org/docs/IP/2014/ENVI/Vision%20ClimateSHAPE%20Melbourne%20Hub.jpg>



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## **Climate SHAPE : Vision and Project**

**Project Title : Reality TV challenge: “Green, Young, Innovative”**

**Hub and country: Paramaribo, Suriname**



# Your Vision

- Suriname still has many of her natural resources. In 2010 an estimated 95% of our land was still covered by forest and many new tropical species are still discovered during expeditions. We are part of the Guiana Shield eco-region which is rich in biodiversity and freshwater.
- Furthermore, we have an extremely low population density of approximately 3.4 per square kilometer.
- **All these conditions give rise to the opportunity to follow a green developmental (low carbon) path and become one of the good examples in the world.**
- This is obviously not the current situation due to unsustainable mining, lack of awareness, the impact of political opportunism etc.
- Currently, positive (intellectual) developments and environmental discussions are mostly confined to environmental NGOs, experts and do not reach the general public sufficiently.
- **In order to make this our reality, the Global Shapers Paramaribo will improve and complement the current knowledge, skills and tools in Suriname necessary for sustainable development.** The hub can create the shift from the current situation in Suriname to the situation we dream about -The role that we can have thanks to the access we have to diverse experts, resources and out of the box thinking (innovativeness and creativity).



# The Problem & The Context

- Climate Change is a global issue. Every country has a role, contributes to emissions to some extent and every country will be impacted. In Suriname the main role will be in the management of our **ecosystems rich in carbon** (forests, wetlands, mangrove ecosystems), but also in **industrial, agricultural and commercial activities**. We definitely need to adapt to the current and future impacts, such as sea level rise, increased heat and seasonal changes. These will mainly impact on health and on the agricultural sector.
- In order to adapt and to mitigate we need to be **innovative and motivated as a society collectively**. Suriname, however has a **lack of human capacity and awareness**.
- With our project we want to **increase human capacity and enhance awareness** by **stimulating green innovation** and transferring knowledge about climate change through a broadcasted reality television competition. We stated the problem as follows: *"This and the lessons learned in other countries give rise to an opportunity to follow a different pathway from Western countries and become a model society following a green developmental path. In order to achieve this mission, Suriname needs to enhance its technical and human capacity by building awareness and stimulating green innovation."*



**«Green, Young, Innovative» - a Reality TV based, Green Technology Innovation Competition is a NEW, NATIONAL Level contest with the goals of achieving the following:**

- Any student (age below 28 years) and other talented youth (age below 24 years) living in Suriname will have the opportunity to showcase a clearly framed solution to an issue related to climate change, either related to mitigation, adaptation or both.
- The participant will follow a supervised process of “idea- framing” and prototyping that will result in a design to be presented during a broadcasted reality television competition. Milestones and challenges during this process will be captured on camera to be used as introduction during each episode of the competition.
- A jury of experts, consisting of at least one engineer, one environmental scientist and one social scientist or policy expert, will publicly comment on the design. We will team up with companies seeking green technological solutions and with the government. These will be encouraged to propose themes relevant to their company processes and environmental footprint and put an expert representative forward as member of the jury or as supervisor.
- The competition will have two rounds: [1] A technical presentation of the design and [2] a business/ management presentation, where the top five candidates are challenged to think beyond the design – on the level of successful implementation taking society into account.
- **7 months first year, but can become a recurring project.**
- *\*detailed business plan in the additional information section*



1. **Public awareness** which can be measured as follows
  - Awareness and knowledge about key subjects will be assessed by asking a randomly selected group of viewers to participate in tests/questionnaires before and after the show.
  - Evaluation with partners and participants
  
2. **Increased green innovativeness** which can be assessed through
  - Questionnaires for participants
  - Evaluation with partners and participants
  
3. **Enhanced entrepreneurship** which can be assessed through
  - Questionnaires for participants
  - Evaluation with partners and participants



## **Project Manager**

Jamille Haarloo

## **Project Team**

Lisa Best

Razia Taus

Agatha Castillo Encarnacion

Donovan Pramy

## **Note:**

- Team also includes two experienced members in TV production and entertainment business

## **Potential collaboration partners:**

- “Got Talent Show”, organized by Staatsolie NV and Telesur NV
- The Directorate for Environment of the Ministry of Labour, Technological Development and Environment (ATM) will be approached to be part of the organizing committee
- Media/TV/Production Companies: Staatsolie NV and Telesur NV ; Fernandes NV is another big Surinamese company with many production processes
- The University – Various experts of the university will be asked to become part of the jury or become a supervisor for the students.



# Additional Information & References

Please see attached detailed business plan:

[http://www3.weforum.org/docs/IP/2014/EN/Communications/BUSINESS  
PLAN\\_climateSHAPE\\_Paramaribo.pdf](http://www3.weforum.org/docs/IP/2014/EN/Communications/BUSINESS_PLAN_climateSHAPE_Paramaribo.pdf)



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## **Climate SHAPE : Vision and Project**

**Project Title : Resilience to young farmers  
Hub and country: Salvador Bahia**



# Our Vision

- Climate records show that over the last 50 years, average annual precipitation in the semi arid area of Bahia has decreased by more than 300 mm (-30%) and average daily temperature has increased by approximately 2 degrees Celsius (twice the global average for the latter).
- These changes have altered smallholder life, pushing farmers into pastoralism as staple crop production has become less and less profitable. Nevertheless, this shift has not protected smallholders from climate vulnerability. Recent records show extreme sensitivity of livestock to climate in region: rising temperatures, decreasing rainfall and increasing deforestation rates expose livestock to ever increasing environmental stress, thereby reducing their productivity.
- Our pilot results on efficient irrigation and improved animal feeding practices show tremendous promise, and highlight important considerations for policymakers. Given the strong ties between farmers in the Sertao and the local bioma – the caatinga, policymakers and rural extension services should consider a new farming perspective, with the caatinga as the basis for agricultural production.
- The magnitude of climate trends in the Sertao in recent decades underscores the need for policy support in mainstreaming specific strategies and technologies to help make the caatinga and farmers more resilient to climate change impacts; these strategies and technologies must be based on successful experiences.



# The Problem & The Context

- Poor farmers in the semi-arid Sertão region of Brazil are highly vulnerable to climate change.
- This region, one of the poorest in Brazil, with 27% of its population under the poverty line, is exposed to increasing average temperatures, worsening drought and greater overall climate vulnerability.
- These climate trends act as “threat multipliers” facing already vulnerable small holder farmers in the county of Bacia do Jacuípe, a semi-arid region of Bahia where the proposed project is located.
- While forecasting the precise timing and magnitude of future climate impacts is not currently possible, climate change is occurring now and poses a serious challenge to business continuity, livelihoods and incomes, market access and the viability of local communities across the Sertão.
- Building sustainable climate resilience in smallholder farms requires strategic interventions in the agricultural value chain: at the level of farm production, in agro-processing, and in marketing and distribution.
- Production at the farm level in Bacia do Jacuípe, and in the semi-arid region of Brazil is constrained by: (i) the lack of a proven production model for climate resilience; (ii) low awareness of technological options for increasing climate resilience; (iii) undeveloped local marketing and distribution channels for services and products that reduce climate risks; (iv) low supply and quality of local technical assistance from local rural extension technicians.



# The Solution (1/2)

- This ONGOING, LOCAL, project aims to build climate resilience in the agricultural value chain of the county of Bacia do Jacuipe, Bahia state by training agricultural school students, who come from small holder families
- By working with the students of Family Agriculture School and training them on these practices, the project tries to help these people that have already committed to family agriculture and have declared that want to be leaders and multipliers in that field. They will learn about climate change and its implications and how they can be resilient to it.
- The project will provide these students with technical assistance and an adaptive, climate smart agricultural production system called MAIS (Modulo Agroclimatico Inteligente e Sustentavel/Smart and Sustainable Agro-climatic System). The project will promote climate change resilience program that can be scaled across the semiarid region of Bahia.
- The approach proposed comprises three main activities:
  - (1) Development and testing of smallholder production systems that combine climatic resilience and an improvement in livelihoods;
  - (2) Establishment of “Appropriate Technology Centers” in the Agricultural Family School to facilitate farmer access to innovative technology and knowledge; and
  - (3) Dissemination of knowledge and technology through a multi-stakeholder model that integrates current policies into a comprehensive adaptation program at the local level.



- **Expected Outcome:**

The coalition seeks to build resilience into smallholder systems through different combinations (depending on the farmer) of five core activities:

- diversification of crop production to reduce dependence on one crop and reduce risk of crop loss due to plant-specific pests and pathogens;
  - adoption of drought-resistant seeds and seedlings;
  - improvement of smallholder water access and management; including use of drip-irrigation technology with specific technical recommendations to prevent soil salinization;
  - preservation and restoration of native Caatinga by intensification of production, afforestation, and
  - cultivation of indigenous protein-rich plants that may be used for animal fodder; and creation of protein-rich diets for livestock in order to increase milk yields.
- **Duration:** 1 year implementation; 4 year monitoring and evaluation for results





## **Impact**

- 250 students from the Family Agriculture School trained on the Smart and Sustainable Agro-Climatic System.
- 1000 farmers (that benefit from the work of those students) are able to cope with heavy drought before their economic activity is forced to stop

## **Context on Family Agriculture School**

- The Family Agriculture School of Jabuticaba located in Quixabeira, Bahia, has 250 students from 14 to 20 years old.
- The students live and study in the school for 15 days every month and in the other 15 days they implement what they have learned.



# The Team & Structure

## **Project Manager**

- Camila Godinho

## **Project Team**

- Juca Cunha
- Isbela Faria
- Malu Argolo
- Loran Santos
- Leonardo Oliveira
- Albano Moura
- Lara Alencar
- Ticiane Figueiredo

## **Partners**

- Adapta Sertao
- Fundo Clima

- More information can be found on [www.adaptasertao.net](http://www.adaptasertao.net)



Ministério do Meio Ambiente



## ÁLBUNS



### Mutirão de plantio de palma adensada em Pé de Serra

Na quarta-feira, 28 de maio, o Adapta Sertão realizou um mutirão de plantio de palma, na fazenda Roçadinho do agricultor José Alexandrino, na comunidade Bujil, município de Pé de Serra.

[Ver mais fotos](#)

### Mutirão para instalação de sistema de irrigação

Na terça-feira, 13 de maio, os técnicos do Adapta Sertão, realizaram um mutirão na fazenda Lajedo do Escudo do proprietário Antonio Jacobina, um dos beneficiários de Projeto, no município de Capela do Alto Alegre, para a instalação de um sistema de irrigação de gotejamento.

[Ver mais fotos](#)

### Entrega de tecnologias aos agricultores(as)

Cada agricultor(a) recebeu um kit contendo 01 motor-cultivador, 01 roçadeira, 01 balança, 01 forrageira e 01 enfardadeira. Ao todo serão



## NOTÍCIAS

Adapta realiza mutirões em Mairi e Itaberaba

[Continuar lendo](#)

Adapta realiza mutirões em Mairi e Itaberaba

[Continuar lendo](#)

Adapta Sertão realiza avaliação de diagnóstico técnico financeiro das cooperativas

## LINKS

- [Adapta Sertão](#)
- [Fundo Nacional sobre Mudança do Clima](#)
- [Redeh - Rede de Desenvolvimento Humano](#)

## REDES SOCIAIS

Acompanhe-nos através de suas redes sociais favoritas:

