

# **GREEN ENTREPRENEURSHIP - ENERGY TECHNOLOGY ENTREPRENEURIAL TRAINING FOR LOW-INCOME HOUSEHOLDS IN GEORGE**

13-17 November 2017

## **EVALUATION REPORT**



A report produced by Sustainable Energy Africa and funded by Heinrich Boell Stiftung



**HEINRICH BÖLL STIFTUNG**  
**SOUTHERN AFRICA**

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## Introduction

A 5-day training course on hotbox manufacture and associated business skills was held in George from the 13–17 November 2017. The course was designed to improve the energy welfare and livelihoods of low-income urban communities in George, through the provision of skills relating to the manufacture and business development of the hotbox.

The training course, provided by Sustainable Energy Africa (SEA) was funded by Heinrich Boell Stiftung. This course aimed at encouraging new livelihoods in the green economy, by providing communities with affordable, accessible and clean energy technologies, also aligns with and enhances the impact of SEA's HBS funded Africa's Energy Future Project. The objective of the Africa's Energy Future project is to support the development of gender-sensitive sustainable energy solutions for low-income households for George, through knowledge dissemination and capacity building of the municipality, district municipality, business, NGOs, and communities.

SEA as the lead project partner, collaborated with the George Business Chamber, a locally based NGO and the George Local Municipality Local Economic Development Department (LED) to undertake this project. Both entities welcomed the course as it aligned with their goals of promoting local economic development in low-income communities in George. SEA worked closely with both the Municipality and the George Business Chamber in the planning and implementation of the course, especially with regards to the identification of appropriate and enterprising individuals from low-income communities from George. SEA also accessed the support of other local NGOs, iThemba Lobomi and the Support Centre for Land Change (SCLC), both of who partner with SEA under the Africa's Energy Future project. The course also received backing from Municipal Electro-Technical Services Department, the driving municipal department on the Africa's Energy Future project.

The course was facilitated by the Green Business College in partnership with Sustainable Energy Africa. The Green Business College is dedicated to building 'green' entrepreneurs by uniting green skills with business aptitude. The core offering of the Green Business College is affordable, comprehensive and well-designed short courses on practical green skills accompanied with business training. The College provides ongoing business coaching and mentoring support to assist with the fruition of the course into a successful green business.

## Aims and Objectives

The main objective of the course was to empower the low-income community members of George, particularly women, on sustainable household energy technologies through imparting skills to manufacture hotboxes and become successful sustainable energy entrepreneurs. By stimulating the local green economy through the manufacture and use of the hotbox technology, low-income households will have access to an affordable energy efficient technology thereby aiding in the alleviation of energy poverty, improved livelihoods and development in George.

This project intends to support and dovetail with SEA's current HBS funded Africa's Energy Future Project, which aims to capacitate George Local Municipality and low-income households in George on energy use and sustainable energy technologies, in order to co-develop gender-sensitive sustainable energy solutions and strategies for low-income households.

## About the participants

This project funded the participation of 15 people to attend the Green Entrepreneur Training Course (See Appendix 1: Course Attendance Register). Participants were predominantly women (87%) from low-income households in George, namely from the communities of Thembaletu, Parkdene, Waboomskral, Pacaltsdorp and Protea Park. The age group of the participants ranged between 18 and 68, with youth (18-34 years old) making up 20%. The participants were vibrant, interactive and eagerly worked in groups throughout the course and supported each other.

## The course proceedings

### Opening of the course

The course opened with a formal welcome and keynote speeches by the project's strategic partners, namely George Business Chamber, George Municipality Local Economic Development department and the Electro-Technical Services department, which inspired and motivated the participants (Appendix 2: Course Programme). Participants were urged to harness the expertise provided by the course and make use of this excellent opportunity to advance themselves economically, in order to combat the poverty challenge they are faced with on a daily basis.

The course received local media coverage and was featured in the George Herald, a popular local newspaper in George (see Appendix 3: Media coverage of the Training Course).



*Figure 1: Municipal partners, the business sector, course participants and convenors present at the official launch of the Green Entrepreneurial Training Course - November 2017  
(Photo source: George Herald newspaper)*

### Practical skills training – designing the hotbox

The first two days of the course involved practical skills in hotbox design and manufacture. With the close assistance of two trainers from the Green Business College, the participants formed teams and were guided on fabric preparation, stitching and the use of the sewing machine (

Figure 2). The use of the hotbox was also demonstrated by cooking rice, which supplemented their knowledge and marketing skills. The demonstration further convinced participants of the ease of use



and effectiveness of the hotbox. At the end of the second day, participants were tasked with testing their newly made hotbox at home.



*Figure 2: Training Day 1: participants in working groups designing the hotbox*

### Business skills training

After completing the hotbox manufacture phase of the course, the training focused on the business skills development. These skills included financing, budgeting, project management, and marketing – elements that are vital to ensuring the sustainability of the business. By means of facilitated engagement, a step-by-step methodology was used to guide the participants on business plan ideas. This included creating a business name, vision, mission, identifying the necessary human resources and a target market. The groups presented their business plans in plenary and innovative business ideas emerged, particularly in identifying a target market. Some of the target markets included workers who are always on site, e.g. construction workers, farm workers, tourists etc. Participants believed that selling hotboxes to these target groups would benefit their cooking needs in terms of keeping food warm and cool without having to use electrical appliances (Figure 3).

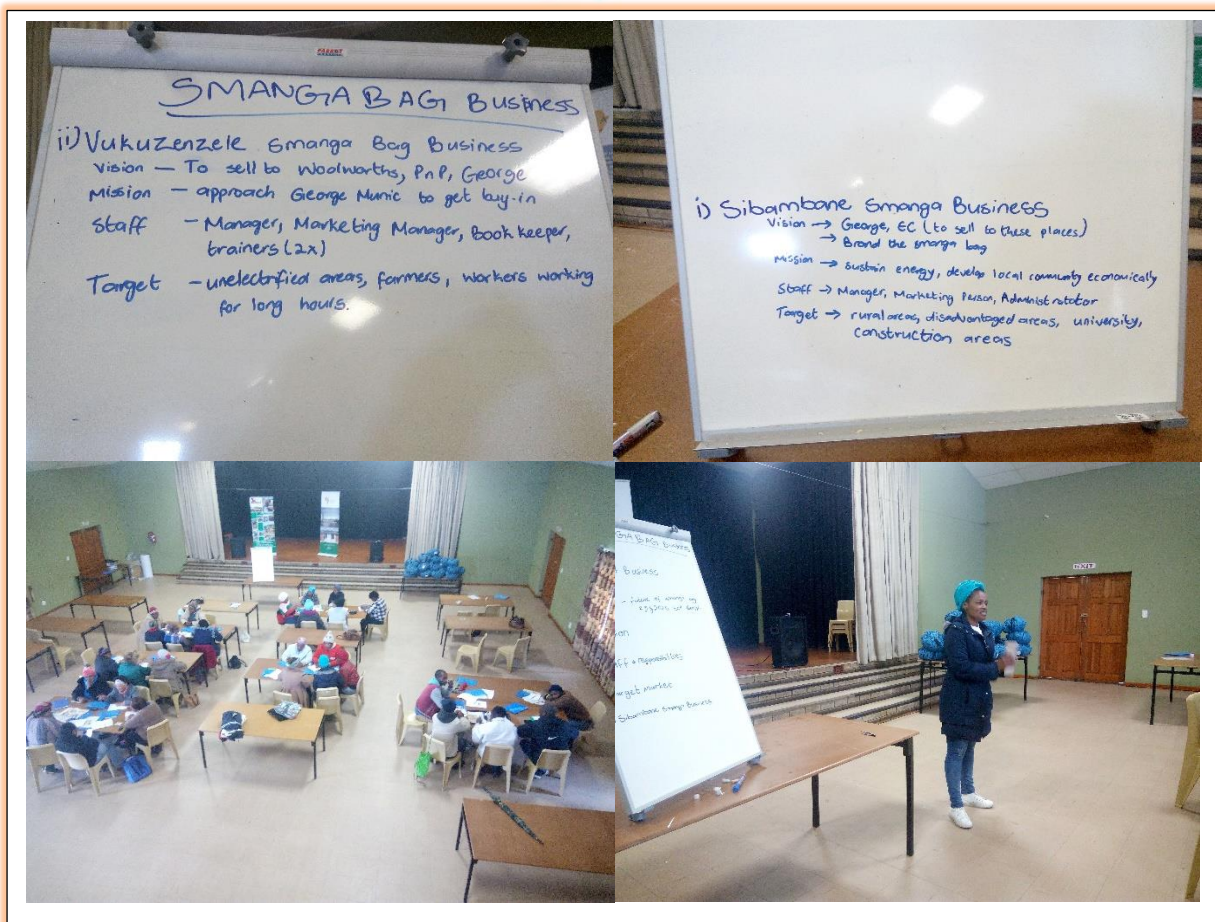


Figure 3: Business Skills Training: participants in working groups to brainstorm business ideas and feedback into plenary

Through a role-playing exercise, participants learned how to improve their marketing skills. This exercise was well facilitated and participants were vibrant, creative and dynamic in demonstrating their understanding of the business concepts taught, as well as their ability to market the hotbox which they got the chance to personally use and experience.

### Certificates of completion

Certificates of participation were presented to participants at the culmination of the course. This event attracted the media and the municipality's Communication Department who came to capture the enthused and budding hotbox entrepreneurs now equipped with the necessary skills (Figure 4). The George Local Economic Development department also made a moving speech to inspire participants on their business journeys, and indicated that they could potentially provide support to participants in their future business endeavors.





Figure 4: Participants receive their certificates of participation on the final day of the course  
(Photo source: George Local Economic Development Department)

## Participants' feedback

There was overwhelmingly positive feedback from participants. In particular, they were complimentary of the knowledge imparted and the exceptionally useful expert skills of the trainers. They felt sufficiently capacitated to manufacture hotboxes and motivated to start a hotbox business. Participants were very eager to share the knowledge and skills they had acquired with other local people in order to build a working community.

*"I feel motivated to start a hotbox business for financial independence and the Smanga bag is very convenient in our communities. I will spread the word about the Smanga bag, form a group with interested women and men and start a co-operative company".*

*Simnikiwe Geia*

*"My immediate steps are to start my own Smanga bag (hotbox) business, and also train people how to design it".*

*Stanza Gwilikana*

Most of the participant's immediate next steps were to register their businesses. Some were ready to embark on their business journeys as they already had clients to sell to.

Participants were extremely appreciative of the offer by the municipality for any further support to their businesses.

*We would like to have more of these trainings for the people because they are motivational and inspire change.*

*Simnikiwe Geja*

Participants requested the project implementers to return to monitor the progress of their business ventures and assist in the setbacks they experience.

*"My next immediate steps are to work as a group and try to convince the George Local Economic Development to assist us".*

*Sipho Bhenqu*

*Thank you to all the facilitators for opening our eyes on how to sustain our lives as women of South Africa.*

*Zameka Dyantyi*

## Lessons learned

During the process of organizing and convening the hotbox training course, key lessons were learnt and it is very important to note these and take into consideration for future projects.

- Strategic partnerships are critical to the success and impact of a significant endeavour such as this. It is essential to partner with local organisations that have strong links in communities to encourage the engagement of participants. SEA was able to harness the help of the project partners as well as the partners under the Africa's Energy Future project, SCLC and iThemba Lobomi with the identification of suitable and enterprising participants.
- Developing new strategic partnerships with relevant local institutions such as the George Business Chamber and the George Municipality's Local Economic Development department enabled alignment and coordination of similar work and political endorsement of the training initiative enhanced the impact of the training. In addition, such partnerships provided a platform for the George Business Chamber and the Municipal Local Economic Development department to learn and incorporate similar skills training in their broader programmes
- Making use of media to raise awareness – the media became a useful platform in creating awareness of this initiative to a larger community of George, thus bolstering the intentions of the Africa's Energy Future project which is to ultimately provide alternative energy technologies such as the hotbox to low-income households.



## Recommendations

It was requested by the participants that the project implementers do a follow-up on the progress of the businesses, and provide support where necessary. Given that there are new partnerships which have been developed with local organizations (George Business Chamber and the George Local Economic Development) whose key focus is on creating a local business industry, it would be worthwhile to provide ongoing support to participants through this project in partnership with local organisations. Buy-in has already been obtained from the George Local Economic Development and they will look into furthering the hotbox entrepreneurship opportunity. Before providing any form of support to participants, it will be vital to monitor the progress of hotbox businesses.

## Conclusion

The Energy Technology Entrepreneur Training Course was successfully completed by 15 individuals from low-income communities from George. Many course participants are now attempting to start their hotbox manufacturing businesses in George. The training was impactful in that it achieved its objectives of equipping households with skills to manufacture and run hotbox businesses in George and in turn helping to improve the livelihoods and health and overall development of households, through supporting an improved level of energy service, enhancing affordability in a sustainable manner and supporting the inclusion of women from low income communities into the energy economy.

Participants expressed their immense gratitude for this initiative and viewed it as an opportunity to improve their livelihoods. Participants were ready to embark on their business ventures to generate income and liberate themselves from the high unemployment and energy poverty they are faced with. Follow-up conversations with a few participants have revealed that some participants have formed teams and have already started to make and sell hotboxes in their communities. The participants have requested that the partners do a post-course monitoring so that they can demonstrate their commitment to the training, and help them evaluate their successes and challenges.

The hotbox training complemented the current work done under the Africa's Energy Future Project, which is to address energy poverty from a gender-sensitive perspective in low-income households of George. The participants, who were mostly women, will add to the complement of green entrepreneurs in George and nationally, promoting access to the clean and affordable sustainable energy technology. These actions will further support the municipality in its quest to include alternative energy technologies such as the hotbox into their energy service delivery mix, hence tackling energy poverty in George.



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BUSINESS  
CHAMBER

## Appendix 1: Course Attendance Register

   					
HOTBOX/SMANGA BAG COMMUNITY TRAINING COURSE					
<b>Venue:</b> Parkdene Civic Centre, George <b>Date:</b> 13-17 November 2017					
Attendance Register: Project 79					
Full Name	13-November 2017	14-November 2017	15-November 2017	16-November 2017	17-November 2017
1. Miena Murray	M. Murray	M. Murray	M. Murray	M. Murray	M. Murray
2. Boniswa Nancy Jara	Boniswa	Boniswa	Boniswa	Boniswa	Boniswa
3. Austin Adams	Austin	Austin	Austin	Austin	Austin
4. Perswill Shauls	Perswill	Perswill	Perswill	Perswill	Perswill
5. Maria Adonis	Maria	Maria	Maria	Maria	Maria
6. Clarence Stuurman	Clarence	Clarence	Clarence	Clarence	Clarence
7. Leighton H Buys	Leighton	Leighton	Leighton	Leighton	Leighton
8. Mona Olislager	Mona	Mona	Mona	Mona	Mona
9. Kathleen Wessels	Kathleen	Kathleen	Kathleen	Kathleen	Kathleen
10. Lizzie Reema Bos	Lizzie	Lizzie	Lizzie	Lizzie	Lizzie
11. Willene Griewelaa	Willene	Willene	Willene	Willene	Willene
12. Georgina Baninzi	Georgina	Georgina	Georgina	Georgina	Georgina
13. Lizzie Cekeshe / Boninzi	Lizzie	Lizzie	Lizzie	Lizzie	Lizzie
14. Elsebe Weavers	Elsebe	Elsebe	Elsebe	Elsebe	Elsebe
15. Sienna Witbooi	Sienna	Sienna	Sienna	Sienna	Sienna
16. Katrina Jaars	Katrina	Katrina	Katrina	Katrina	Katrina
17. Mbulelo Nasenuka	Mbulelo	Mbulelo	Mbulelo	Mbulelo	Mbulelo
18. Christina Feziwe Shumi	Christina	Christina	Christina	Christina	Christina
Thembalethu Chamber	Thembalethu	Thembalethu	Thembalethu	Thembalethu	Thembalethu
Erse Sparks	Erse	Erse	Erse	Erse	Erse
Penelope Jara	Penelope	Penelope	Penelope	Penelope	Penelope
K. KLASSEN	K. KLASSEN	K. KLASSEN	K. KLASSEN	K. KLASSEN	K. KLASSEN

<u>Name</u>	<u>13/11/2017</u>	<u>14/11/2017</u>	<u>15/11/2017</u>	<u>16/11/2017</u>	<u>17/11/2017</u>
Walden Vrolijk		W V	W Vrolijk	W Vrolijk	W Vrolijk
K. KLAASSEN	K. KLAASSEN	K. KLAASSEN	C. KLAASSEN	K. KLAASSEN	K. KLAASSEN
Zennewa Jara					
Eric Sparks					
Cathy Laws			claw		



## Appendix 2: Course Programme

### **HOTBOX/SMANGA BAG COMMUNITY TRAINING COURSE**

**Venue: Parkdene Civic Centre, George**

**Date: 13-17 November 2017**



#### **COURSE BACKGROUND**

This 5-day training course aims to improve the energy welfare and livelihoods of low income urban communities in George, through the provision of skills relating to the manufacture and business development of the Hotbox/Smanga Bag, an efficient and clean alternative household energy technology. The course will be undertaken by the Green Business College in partnership with Sustainable Energy Africa (a not-for-profit organization supporting cities and other institutions with sustainable energy development) and funded by Heinrich Boell Stiftung, a German development foundation. The course is endorsed by George Municipality and the George Business Chamber.

#### **Included in the course are the following:**

- materials required to make a Smanga bag
- personal manual
- certificate of completion
- membership to the Green Business College

#### **What to bring to the course:**

- entrepreneurial spirit and lots of energy!

#### **About the hotbox/Smanga Bag**

The Hotbox technology is an insulated cooker made up of two cushions/bags of heat resistant material filled with an insulator such as polystyrene discards, into which a pot of food brought to the boil is removed from the stove and placed between the two cushions/bags. The hotbox uses the principle of thermal insulation to continue the cooking process without requiring additional heat. This technology works with any meal that involves simmering over a low heat for an amount of time; rice, stews, porridge, and vegetables are all suitable. Hotboxes are very simple, effective,

convenient, and save a substantial amount of cooking energy – tests show that between 50% and 60% of cooking energy is saved. The hotbox also has the potential to significantly reduce cooking time. In the many low-income households where paraffin, wood or coal is typically used for cooking, a direct improvement in indoor air quality can be expected from hotbox use. Hotboxes are relatively easy to make, and thus lend themselves to decentralized small business production in low-income areas, and can be made using low-cost, recycled materials.

## COURSE PROGRAMME

The course programme is as follows:

- 1) The first two days will focus on teaching participants how to construct the hotbox
- 2) The last three days will focus on imparting business skills on how to create a sustainable hotbox business

### DAY 1: OPENING OF THE COURSE

(09h00-09h30)

Welcome and Introductions: Peliwe Jubase (Sustainable Energy Africa)

#### Keynote address:

Dr Willie Cilliers (Chairman of the George Business Chamber)

&

Electrotechnical Services Portfolio Councillor Edmund Bussack (*to be confirmed*)

### DAY 1: PRACTICAL SKILLS TRAINING: 09h00-16h00

Participants will be taught how to construct the Smanga Bag and in a manner that yields a product of high standard - high durability and good retail quality.

The content of the training will cover the following:

- materials required for the construction of the Smanga bag
- learning about calculating dimensions of the product - how to take measurements and make calculations to construct various sizes of the product
- designing patterns of the product – imparting skills on drawing, cutting and pinning sewing patterns
- learning how to cut fabric and sew the product by hand and using a sewing machine

### DAY 2: CONTINUATION OF PRACTICAL SKILLS TRAINING: 09h00-16h00

The content of the training will cover the following:

- continuation from DAY 1 of cutting and sewing fabric by hand and machine
- sewing the lid component of the product
- demonstration of how to use a Smanga bag
- awareness of the energy savings associated with using a Smanga bag
- determining the costs of making a Smanga bag

### **DAY 3: BUSINESS SKILLS TRAINING: 09h00-16h00**

This component of the course will take participants through the necessary steps to turn their products into a business. A very dynamic and practical approach is used to give participants maximum hands-on experience as they develop their own individual, business plan. Participants are given the opportunity to explore and develop their own networks.

The training content will cover the following:

- how to start a Smanga Bag business
- understanding assets, stocks, cash and credit
- development of a balance sheet
- quality and value-add skills

### **DAY 4: CONTINUATION OF BUSINESS SKILLS TRAINING: 09h00-16h00**

The training content will cover the following:

- how to market 'My Product'
- learning about production, sales, and costs
- developing an income statement
- managing cash flow
- growing 'My Business'
- Afternoon sales exercise: Participants will be given the task of selling their Smanga bags in their communities or wherever they perceive they would be able to sell their product. The outcomes and their experiences from this exercise will be discussed in Day 5.

### **DAY 5: CONTINUATION OF BUSINESS SKILLS TRAINING: 09h00-16h00**

The training content will cover the following:

- Reflection from the sales exercise
- Vision & values exercise
- 5 Step Ultimate Success Formula (Tony Robbins)
- Being organised (Your Daily 5)
- Mastering sales (7 step sales process)
- Your elevator pitch
- Starting with WHY (Simon Sinek)
- Business model canvas exercise



## About the organizations involved in convening the Hotbox/Smanga Bag training course

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### 1. The Green Business College

**The Green Business College** is dedicated to building 'green' entrepreneurs by uniting green skills with business know-how. The Green Business College was established in 2017 as a social enterprise by SEED Community ([www.seedcom.org](http://www.seedcom.org)). Inspired by the BOOKBRIDGE model ([www.bookbridge.org](http://www.bookbridge.org)), it has been founded with the support of the HILTI Foundation ([www.hiltifoundation.org](http://www.hiltifoundation.org)).

**The vision** the Green Business College is to be an inspiring and innovative hub of learning, fostering a community of successful 'green' entrepreneurs and be replicated in communities across Africa creating a network of centres, trainers and 'green' entrepreneurs.

The core offering of the Green Business College is affordable, short courses where students are taught practical 'green' skills accompanied with business skills and provided access to sales channels where they can sell their products. As part of our offering, we provide students with ongoing business coaching and mentor support. By course end students are able to establish their own small 'green' business, which will not only provide them with financial autonomy but also form part of a sustainable solution to the environmental, economic and social crisis South Africa is facing today.

**Manager of the Green Business College: Dorah Marema**

Dorah has been director of SEED Community in South Africa since 2014. Alongside her passion for the social and economic empowerment of young women, Dorah holds a wealth of experience in the environmental sector in Africa spanning 20 years. She received an award by the United Nations for her work in this field in 2015. Harnessing her talent for community development, her passion for the environment and the economic and social empowerment of the community at large, Dorah is the ideal manager for such an initiative.

**Tel No.:** +27 (79) 0680789 Email: [info@greenbusinesscollege.com](mailto:info@greenbusinesscollege.com)

**Website:** [www.greenbusinesscollege.com](http://www.greenbusinesscollege.com)

### 2. Sustainable Energy Africa

Sustainable Energy Africa (SEA) is a not-for-profit organisation that has been working in the area of sustainable urban energy development with local government for the last 18 years. SEA promotes equitable, low carbon, clean energy development in urban South Africa and Africa. Through our work, we promote energy efficiency, the transition to more sustainable energies such as solar and wind power and access to safe and affordable energy services for all. We do this through research, capacity building, policy engagement and information dissemination.

South Africa is in an enviable position with regard to natural energy resources, particularly renewable energy sources. SEA is at the forefront of promoting sustainable, efficient and cost-effective energy whilst at the same time addressing poverty, climate change, and environmental issues.



While SEA works with all three spheres of government, we focus particularly on local government as this is the seat of delivery, and where capacity shortages are greatest. Sustainable energy transitions require that municipalities take a more proactive role in energy management if the country is to meet the challenges of sustainable development.

The team from SEA responsible for the running of this training course are:

Yachika Reddy - [yachika@sustainable.org.za](mailto:yachika@sustainable.org.za)

Peliwe Jubase - [peliwe@sustainable.org.za](mailto:peliwe@sustainable.org.za)

Simisha Pather-Elias - [simisha@sustainable.org.za](mailto:simisha@sustainable.org.za)

**Contact details:** 021 702 3622

**Website:** [www.cityenergy.org.za](http://www.cityenergy.org.za)  
[www.sustainable.org.za](http://www.sustainable.org.za)

## Appendix 3: Media coverage of the Training Course

### A. ONLINE MEDIA COVERAGE

#### Hotbox project contributes to bigger picture in George

Nov 14, 2017

<https://www.rnews.co.za/article/17322/hotbox-project-contributes-to-bigger-picture-in-george>

1



A five-day workshop to teach women and youth to make 'hotboxes' not only develops skills, supports business and saves energy, but also forms part of a research project on energy uses and challenges in low income households.

The project partnership involves the resources and skills of Sustainable Energy Africa, Green Business College South Africa, iThemba Lobomi, the George Business Chamber and George Municipality with Heinrich Boell Stiftung, a German development foundation, funding the hotbox training course.

Thirty-five participants are this week learning to make hotboxes, also known as Smanga Bags, which are padded, insulated fabric bags in which pre-boiled pots can be placed to slow cook food without further use of electricity.

The bags save electricity, which has financial and environmental benefits, and contributes to indoor air quality and safety in houses where cooking is done on an open fire or paraffin stove.

15 Green Entrepreneurship Training Course for low-income households in George, 2017



As they are relatively easy to make using low-cost and recycled materials, hotbox making and selling is also a business opportunity for inspiring entrepreneurs. The workshop also provides business development skills to help participants start a sustainable hotbox business.

The hotbox training programme forms part of a research project by Cape Town-based NGO Sustainable Energy Africa, who is, with the assistance of the George Municipality electrotechnical department, conducting research surveys and focus groups regarding energy usage and challenges in Thembaletu and Lawaakamp.

The information gathered will feed into municipal strategic planning for low-income households in urban George.

*Image: Back from left are George Municipality strategic services portfolio councillor David Willemse, George Business Chamber Chairman Dr Willie Cilliers, iThemba Lobomi community coordinator Zameka Dyantyi, Sustainable Energy Africa training coordinator Peliwe Jubase and (front from left) George Municipality electrotechnical planning department official Steyn van der Merwe, Green Business College trainers Mamosweu Tsoabi and Dineo Tsoabi, and George Municipality manager economic development Pedro Oliphant*

## B. MEDIA COVERAGE IN THE LOCAL GEORGE HERALD NEWSPAPER



The article was originally published in the George Herald – November 2017