



DATE: 06 April 2022

REPORT TO: COUNCIL

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**1. ITEM NUMBER : MC 09/05/22**

**2. SUBJECT**

REQUEST FOR APPROVAL FOR THE CLOSE-OUT OF THE CITY OF CAPE TOWN'S RESIDENTIAL SOLAR WATER HEATER ACCREDITED SERVICE PROVIDER PROGRAMME (CCT SWH ASP PROGRAMME).

**ONDERWERP**

VERSOEK OM GOEDKEURING VIR DIE AFSLUITING VAN DIE STAD KAAPSTAD SE PROGRAM VIR GEAKKREDITEERDE DIENSVERSKAFFERS VIR RESIDENSIËLE SONKRAGWATERVERWARMERS

ISIHLOKO ISICELO SOKUPHUNYEZWA KWENGXELO YOKUGQIBELA YENKQUBO YESIXEKO SASEKAPA ENGOMBONELELI WENKONZO OPHUNYEZIWEYO KUBAHLALI NGEZISHUSHUBEZI ZAMANZI EZISEBENZISA IMITHA YELANGA (INKQUBO YE-CCT SWH ASP)

N2399

**3. DELEGATED AUTHORITY**

In terms of delegation Energy

This report is for DECISION BY

- Committee name :**
- The Executive Mayor together with the Mayoral Committee (MAYCO)
- Council

## 4. DISCUSSION

### i. Summary

The report seeks to obtain authority from Council to approve the close-out of the City of Cape Town's (CCT) Residential Solar Water Heater (SWH) Accredited Service Provider (ASP) Programme. It is proposed that support to residential energy users be broadened to accommodate a range of technologies that have become applicable and affordable for consumers as well as the larger range of mechanisms available to save energy and costs on electricity bills.

### ii. Background

The CCT SWH ASP Programme was launched in 2014. Its objectives were to increase the market penetration of SWH's in the mid to high income residential sector in Cape Town and to provide the end user with a cost effective, high quality product that offers energy and money savings on the electricity bill. The CCT SWH ASP Programme was instrumental in the roll out and increased uptake of SWH within the high and middle income communities through the commencement of intensive promotion, education and advertising campaigns; and the endorsement of service providers. Furthermore, it appears that with the maturation of the industry, the challenge of a proliferation of smaller, less qualified and lower quality installations is not as prevalent.

As at May 2018, 12 service providers were accredited through the programme. The total reported installations of SWHs and heat pumps by the ASPs, since the beginning of the programme (2014), stands at approximately 11 300 and a total of almost 18 000 requests for information generated through the CCT SWH Programme. These installations represent approximately R200 million into the economy and an electricity saving of 114 GWh.

While noting the various benefits rendered by the programme and the goals achieved, there have been a number of changes in the market that render its continued operation unfeasible and unnecessary. These include the lack of capacity within the City to continue to host the programme, financial limitations, further technology development with more options now available in the market, and new building regulations (SANAS 10400-XA). Following reasonable deliberations, it is deemed appropriate to dissolve this specific programme and rather expand and broaden the support offered to residents through existing and alternative means. The aim can then be widened to promote and escalate energy efficiency and renewable

energy uptake by households to facilitate achieving the City's carbon neutrality and energy security goals.

In order to close out the programme, the City has undertaken a close-out process with the ASPs. Finally, Council approval of the closure is required, after which an official notice to the effect will be issued to the ASPs.

### **iii. CCT SWH Close-out Process**

The CCT has undertaken a close-out process to both reflect on the programme's achievements and the current state of the residential energy market, while also garnering input from SWH installers and industry role players on the future opportunities to further promote and support residential energy demand management and renewable energy.

The purpose of the close-out process is to:

- Determine the impact of the programme from the perspective of the ASPs, industry bodies and other market role players
- Mitigate potential risks (reputational mainly) associated with the formal closure of the programme
- Celebrate and communicate the success of the programme
- Once confirmed, communicate the formal closure of the programme, especially with the ASPs, and encourage these installers to register with other industry accreditation bodies.
- Identify next steps for the City to support the large scale roll-out of alternative energy and energy efficiency for households in Cape Town.

There are three phases to this close-out process that will be implemented in the following order:

1. **Engagement:** A series of semi-structured bi-lateral interviews with current ASPs and other industry and market bodies to determine the impact of the programme and the opportunities for future alternative energy promotion and facilitation by the City of Cape Town.
2. **Council Decision:** A report that is developed using the outcomes of the engagements, a summary of the programme and key recommendations is sent to council to give a final decision on the closure of the current programme.
3. **Contract Termination:** The legal process to formally and legally terminate the programme, specifically outlining the prohibition on the continued and future use of the programme's logo in any company communications.

#### iv. CCT SWH ASP Programme Close-out Process Outcomes

##### Phase 1: Engagement

During July and August 2021, two sets of interviews were undertaken for the first phase of the CCT SWH ASP Programme Close-out process; one set with those noted as ASPs in the programme, 10 interviews, and a second set of interviews with key industry role players, 6 interviews, resulting in a total of 16 interviews. The interviews sought to understand the impact of the CCT SWH ASP programme, current opportunities and challenges in the residential energy market, and suggestions as to the role of the CCT in this market segment.

The main outcomes of the interviews were as follows:

- Engagement with customers a key success of the SWH ASP Programme
- Changes in the residential energy market require a more holistic approach
- Any incentive or rebate programme must be carefully designed to limit unintended consequences
- The CCT has a critical role to play in supporting customer decision-making

The full synthesis and analysis of the above key points from across these interviews are provided in **Annex A** to inform both the close-out process, as well as the planning for further support initiatives to the residential energy market. The full interview questions and responses are provided in **Annex B**, for reference.

#### v. Way Forward

The insights provided by the interviews with the ASPs and the industry role players both reinforces the experiences of the City of Cape Town in its own SWH ASP programme, while also expanding our understanding of the current state of the market, its opportunities and perspectives on the role the City should take on going forward.

Building on the successes of the CCT SWH ASP programme, while responding to the proposals of the market interviews, it is therefore proposed that the programme in its current format be closed. A new phase of the programme should, firstly, expand its current focus from only SWH to be more technology agnostic, rather focusing on the impact desired, i.e. improved residential energy efficiency, increased use of renewable energy sources, and energy conservation. Secondly, the City should apply an increased and continued residential awareness raising and communications campaign through another existing programme, such as the net zero carbon existing buildings work and the Let's Act Campaign. This campaign would not only seek to provide the resources,

prompts and nudges to better promote the uptake of residential energy efficiency investments, but also support residents' decision-making to ensure they are receiving high quality installations and the desired outcomes of energy efficiency and cost savings.

4.1. Financial Implications  None  Opex  Capex

Capex: New Projects

Capex: Existing projects requiring additional funding

Capex: Existing projects with no Additional funding requirements

No additional financial commitments are required from the City to support the recommendations outlined in this report.

4.2. Policy and Strategy  Yes  No

Legislative Vetting  Yes  No

4.3. Legal Implications  Yes  No

4.4. Staff Implications  Yes  No

4.5. Risk Implications  Yes The risks for approving and/or not approving the recommendations are listed below:

The absence of the accreditation programme runs the risk of proliferation of poor quality installation thus affecting the integrity and value of City's previous endorsement of service providers. In addition, there may be relationship strains between the service providers and customers in the event of discrepancies. The City sees quality assurance, monitoring and compliance role as that of industry bodies, such as the South African Photovoltaic Industry Association (SAPVIA). This risk is unavoidable, however the City will

apply an increased and continued residential awareness raising and communications campaign through other existing programmes. These programmes would not only seek to provide the resources, prompts and nudges to better promote the uptake of residential energy efficiency investments, but also support residents' decision-making to ensure they are receiving high quality installations and the desired outcomes of energy efficiency and cost savings.

In addition, there is a risk that the relationship between the City and the current ASPs will be soured as the City discontinues the accreditation and stops promoting these service providers. This risk is unavoidable.

The risk of **not** dissolving the programme will subject the City to investing extensive human and financial capital, thus depriving the broad awareness and communications campaign of critical capital for its successful rollout/implementation. The full potential and enabling factor of the campaign will not be realised to provide the City's residents information on energy savings, technology advice, financial mechanisms and information on regulatory requirements to achieve the City's goals.

In addition, operating the programme without the necessary and detailed quality assurance required, carries many risks to reputation of the City and the SWH industry.

- No Report is for decision and has no risk implications.
- No Report is for noting only and has no risk implications.

POPIA Compliance  Yes It is confirmed that this report has been checked and considered for POPIA compliance.

## 5. RECOMMENDATIONS

It is recommended that the Council approves the dissolution of The City of Cape Town's SWH Accreditation Programme

**AANBEVELING**

Daar word aanbeveel dat die Raad goedkeuring verleen vir die ontbinding van die Stad Kaapstad se akkreditasieprogram vir sonkragwaterverwarmers.

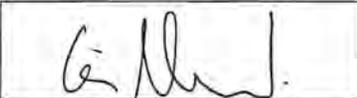
**IZINDULULO**

Kundululwe ukuba iBhunga maliphumeze ukupheliswa kweNkqubo yeSixeko saseKapa engoBonelelo kubahlali ngezishushubezi zamanzi ezisebenzisa imitha yelanga (iSWH).

**ANNEXURES**

- Annexure A: SWH Closeout Process Report
- Annexure B: ASP and Industry interview questions and responses
- Annexure C: Let's Act Campaign memo Annexure
- D: SWH Project Closeout report

**FOR FURTHER DETAILS CONTACT**

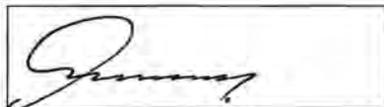
NAME	Leila Mahomed Weideman	CONTACT NUMBER	021 400 5953
E-MAIL ADDRESS	Leila.MahomedWeideman@capetown.gov.za		
DIRECTORATE	Energy	FILE REF NO	
SIGNATURE : DIRECTOR			

**EXECUTIVE DIRECTOR**NAME *FARRI MASSIEP*COMMENT: *SUPPORT THE*

DATE

*CLOSURE OF THE PROGRAMME*

SIGNATURE



*THIS DOES NOT IMPLY THAT  
NO FURTHER WORK WILL BE DONE*

The ED's signature represents support for report content and confirms POPIA compliance.

*IN SUPPORTING SWH  
ROLLOUT*

**LEGAL COMPLIANCE**

- REPORT COMPLIANT WITH THE PROVISIONS OF COUNCIL'S DELEGATIONS, POLICIES, BY-LAWS AND ALL LEGISLATION RELATING TO THE MATTER UNDER CONSIDERATION.
- NON-COMPLIANT

NAME

COMMENT:

DATE

Certified as legally compliant based on the content of the report.  
  
For onward recommendation by the Executive Mayor together with the Members of the Mayoral Committee to Council for approval.

SIGNATURE

**Sarah Sanders**  
Digitally signed by Sarah Sanders  
Date: 2022.04.14 05:51:53 +02'00'

Mayco Member: Cllr Beverley van Reenen:

**Beverley van Reenen**  
Digitally signed by Beverley van Reenen  
Date: 2022.04.13 15:12:36 +02'00'

Signed: 13/04/2022



CITY OF CAPE TOWN  
ISIXEKO SASEKAPA  
STAD KAAPSTAD

ENERGY & CLIMATE CHANGE  
SUSTAINABLE ENERGY MARKETS

Date: September 2021  
To: Leila Mahomed Weideman

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## Report on the close-out process for Residential Solar Water Heater Accredited Service Providers Programme

### Background

The City of Cape Town's (CCT) Residential Solar Water Heater (SWH) Accredited Service Provider (ASP) Programme was launched in 2014. Its objectives were to increase the market penetration of SWH's in the mid to high income residential sector in Cape Town and to provide the end user with a cost effective, high quality product that offers energy and money savings on the electricity bill. The CCT SWH ASP Programme was instrumental in the roll out and increased uptake of SWH within the high and middle income communities through the commencement of intensive promotion, education and advertising campaigns; and the endorsement of service providers. Furthermore, it appears that with the maturation of the industry, the challenge of a proliferation of smaller, less qualified and lower quality installations is not as prevalent.

As at May 2018, 12 service providers were accredited through the programme. The total reported installations of SWHs and heat pumps by the ASPs, since the beginning of the programme (2014), stands at approximately 11 300 and a total of almost 18 000 requests for information were generated through the CCT SWH Programme. These installations represent approximately R200 million into the economy and an electricity saving of 114 GWh.

Despite the various benefits rendered by the programme and the goals achieved, there have been a number of changes in the market that render its continued operation unfeasible. These include the lack of capacity, financial limitations, broader technology options available in the market, and new building regulations. Following reasonable deliberations, it is deemed appropriate to dissolve the programme and to expand and broaden the support offered to residents with the aim to promote and escalate energy efficiency and renewable energy uptake by households to facilitate achieving the City's carbon neutrality goals.

The City of Cape Town has therefore undertaken a close-out process to both reflect on the programme's achievements and the current state of the residential energy market, while also garnering input from SWH installers and industry role players on the future opportunities to further promote and support residential energy demand management and renewable energy.

The purpose of the close-out process is to:

- Determine the impact of the programme from the perspective of the ASPs, industry bodies and other market role players

- Mitigate potential risks (reputational mainly) associated with the formal closure of the programme
- Celebrate and communicate the success of the programme
- Once confirmed, communicate the formal closure of the programme, especially with the ASPs, and encourage these installers to register with other industry accreditation bodies.
- Identify next steps for the City to support the large scale roll-out of alternative energy and energy efficiency for households in Cape Town.

There are three phases to this close-out process that will be implemented in the following order:

1. **Engagement:** A series of semi-structured bi-lateral interviews with current ASPs and other industry and market bodies to determine the impact of the programme and the opportunities for future alternative energy promotion and facilitation by the City of Cape Town.
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3. **Contract Termination:** The legal process to formally and legally terminate the programme, specifically outlining the prohibition on the continued and future use of the programme's logo in any company communications.

## Results from Phase 1: Engagement

During July and August 2021, two sets of interviews were undertaken for the first phase of the SWH ASP Programme Close-out process; one set with those noted as ASPs in the programme, 10 interviews, and a second set of interviews with key industry role players, 6 interviews, resulting in a total of 16 interviews. The interviews sought to understand the impact of the SWH ASP programme, current opportunities and challenges in the residential energy market, and suggestions as to the role of the City of Cape Town in this market segment.

This section provides a synthesis and analysis of the key points from across these interviews to inform both the close-out process, as well as the planning for further support initiatives to the residential energy market. The full interview questions and responses are provided in Annex A and B, respectively, for reference.

### Engagement with customers a key success of the SWH ASP Programme

Overall feedback from across the range of ASPs indicated that the most appreciated aspect was the City of Cape Town's engagement with customers to support and stimulate demand for solar water heating solutions. This was done through a number of mechanisms with the rates leaflet being noted as a key success by the installers. Importantly, these actions by the City were seen to increase trust and raise awareness amongst residents, i.e. potential customers, while supporting customer decision-making for how they can invest in their homes to reduce their energy demand. Finally, this awareness raising did also create beneficial exposure for the ASPs thereby increasing their visibility to customers.

### Changes in the residential energy market require a more holistic approach

Both the ASPs and industry role players noted that there have been significant changes in the residential energy market over the past seven years while the programme was active. Firstly, the rise in awareness regarding photovoltaic (PV) systems, along with the associated improvements in technology and decreases in cost, has shifted market interest towards PV and other energy

systems in homes. This has been alongside an associated decrease in market interest for SWHs, which has been attributed to:

- Reduced support from national awareness raising programmes;
- Limited improvements in technology and therefore little reduction in the cost – SWH cost still prohibitive;
- Perceptions of poor reliability from the difficulties experienced in the low-pressure SWH programme's implementation across South Africa;
- The demand for PV increased with the increased need for broader residential energy security in the face of ESKOM's loadshedding and provided greater energy use flexibility; and
- In Cape Town, the impact of the drought and related water restrictions resulted in a longer payback period for investment in SWH.

These changes have required that the ASPs diversify their product offering to include PV systems and heat pumps, along with other interventions, thereby increasing their sales overall even though the sale and installation of SWHs declined. Industry role players also reflected on how these changes in the market require a broader and more holistic approach to support residential customers to increase their energy efficiency.

Finally, since the start of the SWH ASP programme, there has been the introduction of two new certification systems as led by industry bodies:

- ██████████ Membership and badge
- ██████████ green card

Each of these have their own accreditation processes, with SAPVIA also providing training to green card holders. These organisations charge an annual membership fee and then conduct an oversight role of these members by providing a mechanism to follow up on any customer complaints regarding services and installations. These are however provided reactively, rather than proactively, unlike the City's SWH ASP programme. With these two accreditation bodies in place providing a similar service to customers and the market, as was done by the City's SWH ASP programme, it requires a re-examining of the role of the City going forward.

#### **Any incentive or rebate programme must be carefully designed to limit unintended consequences**

The ESKOM rebate programme was a common topic of conversation, especially among the industry bodies. Key lessons learnt from this incentives programme were:

- The change in focus from higher income households with high pressure SWH systems to lower income households with lower pressure SWH systems fundamentally changed the nature of the programme from one focused on reducing energy demand from the national grid to one of increased energy access and social development. Both are equally important, however they require different approaches and cannot be successfully incentivised in the same manner.
- The programme ultimately did more to stimulate the supply side of the market with a large increase in the number of installers, with an insufficient focus on the stimulation of demand in the market. This limited the long term sustainability of many of the newer and smaller companies that were seeking to benefit from the programme and therefore limiting longer term job creation.
- The programme closed without full consideration of the impacts that withdrawing the financial incentives would have on the market. This left many companies in financial

difficulty and therefore needs to be more carefully considered if any future incentive programmes are being developed.

These lessons point to the need for a cautious approach to the use and implementation of incentive programmes, with a greater call for alternative change mechanisms to be used, such as awareness raising and communications campaigns regarding benefits of residential energy efficiency.

### **The City of Cape Town has a critical role to play in supporting customer decision-making**

The biggest challenge noted by the majority of those interviewed was that of limited understanding of the benefits of solar water heating by residents and potential customers, along with limited understanding of how to make a good investment decision when considering energy efficiency, renewable energy, and demand management interventions for one's home. This was noted as a key opportunity and role for the City of Cape Town to fulfil, as supported by other spheres of government and through potential partnerships with industry bodies.

The City already has a number of engagement mechanisms whether through digital campaigns, websites, development of resources, and demonstration projects to make residential energy interventions more tangible.

### **Way forward**

Building on the successes of the CCT SWH ASP programme, while responding to the proposals of the market interviews, it is therefore proposed that the programme in its current format be closed. The insights provided by the interviews with the ASPs and the industry role players both reinforces the experiences of the City of Cape Town in its own SWH ASP programme, while also expanding our understanding of the current state of the market, its opportunities and perspectives on the role the City should take on going forward. The key actions for the way forward are summarised below:

#### **Broaden engagement to be technology agnostic**

A new phase of the programme should, firstly, expand its current focus from only SWH to be more technology agnostic, rather focusing on the impact desired, i.e. improved residential energy efficiency, increased use of renewable energy sources, and energy conservation.

#### **Increased engagement with customers to support decision-making**

Secondly, the City should apply an increased and continued residential awareness raising and communications campaign through another existing programme, such as the net zero carbon existing buildings work and the Let's Act Campaign. This campaign would not only seek to provide the resources, prompts and nudges to better promote the uptake of residential energy efficiency investments, but also support residents' decision-making to ensure they are receiving high quality installations and the desired outcomes of energy efficiency and cost savings. Closing down of ASP website: The Saving Electricity website will continue to be a resource for our customers to still access information on energy efficiency, but the ASP page and its functionality will be closed down.

It is therefore proposed that the engagement focus on supporting decision-making on two key sets of questions:

1. How can residents understand their home energy use? How can they determine which interventions are best suited for their home and budget?

2. How can residents know that they can trust the services of installers? What are the standards and regulations that must be adhered to by installers? What voluntary industry bodies can provide greater certainty of the quality of installers?

**Further engagement with ASPs and industry bodies**

To manage expectations associated with the close out process with the former ASPs, the City will undertake the following:

- Close out meeting, most likely in Q3 in FY 2021/22, where we encourage registration with existing industry accreditation processes, such as [REDACTED] and [REDACTED], and share information from organisations, such as GreenCape.
- Encourage ASPs to join and attend the Energy, Water and Waste Forum (join mailing list and attend events)
- After this meeting, the City will issue a letter regarding the close out of the programme and requests to no longer use the ASP logo and any other contractual implications

Once the Council Report is approved, the City will share this with all those engaged with during the interviews and inform them of the way forward to maintain the relationships established.

## Annex A

The proposed questions for other relevant industry bodies are:

1. What is your role/current engagement in the residential energy market?
2. How do you currently engage with solar water heater/solar thermal installers in the market?
3. What do you know about the City of Cape Town's Solar Water Heater Accredited Service Provider programme?
4. What benefit(s) do you believe the market derived from the Solar Water Heater Accredited Service Providers Programme or other similar accreditation programmes?
5. What are the current challenges being faced in the solar water heating market/industry? How has this changed over the past 10 years?
6. What are the key opportunities to take hold of in the solar water heating and/or alternative energy market at present? While the City's programme is focused on the residential sector, are there additional opportunities for solar thermal in the commercial (hotel) and industrial sectors?
7. What role do you believe the City of Cape Town should be taking to support greater adoption of alternative energy and energy efficiency measures in the residential market, especially for existing buildings?

The proposed questions for Accredited Service Providers are:

1. How are things going overall – sales, marketing, and enquiries – as a general snapshot assessment of the market out there right now?
2. Throughout the programme what impact has the City's Solar Water Heater Programme provided to the market in general and to your company, in particular, and have there been sectors where this impact has been higher?
3. Throughout the programme what value has the City's marketing provided to your company? Which marketing mechanism in particular was of use? Can you estimate the percentage of queries received through this platform over its life?
4. Do you feel that the Solar Water Heater Programme has provided a mechanism to develop greater trust and quality assurance in the technology and the installers for customers?
5. Is there still a need to provide a mechanism to improve customer's trust in installers and provide quality assurance?
6. What other accreditations do you have for your company/installations (current/future), ISO, other industry bodies, etc.?
7. What's your biggest challenge right now in terms of sales? How has this changed over the past 10 years?
8. What are the biggest opportunities you see in terms of your growth in sales? Are there specific sectors where you are currently seeing growth or expecting growth?
9. What role do you believe the City of Cape Town should be taking to support greater adoption of alternative energy and energy efficiency measures in the residential market, especially for existing buildings?
10. Any other comments or questions?

## Annexure B

- Interview Responses from Accredited Service Providers
- Interview Responses from industry role players

	ASP 1	ASP 2	ASP 3	ASP 4
<b>How are things going overall – sales, marketing, and enquiries – as a general snapshot assessment of the market out there right now?</b>	Solar uptake slowed down due to cost factors. Customers currently looking for cheaper alternatives (eg stainless steel ceramic element, solar pv pane connected to element)	Stopped doing solar hot water due to number of alternatives (element) and due to technical, regulatory reasons as well as being undercut by unaccredited bakkie guys. Market has gone towards solar electric due to growing loadshedding and therefore investments gone into solar pv. Working with IDP to promote solar electric investments. After rebate, SWH investments have reduced.	Experienced a strong market in last 5 years. Fully booked. 80% from solar PV. SWH costs have not gone down.	Business is ok in solar water. Not like it used to be. Involved solar pv to stay afloat
<b>Throughout the programme what impact has the City's Solar Water Heater Programme provided to the market in general and to your company, in particular, and have there been sectors where this impact has been higher?</b>	In general, programme Made people aware of alternatives in water heating. For company assisted in terms of marketing - made customers comfortable because of guarantee point of view and liability, created good working relationship. Installations also grew in developments	Great programme. Provided assurance and accreditations to build the solar brand by undergoing rigorous accreditation process. Created awareness to customers as well as affordability through rebate. People trust what gov says therefore programme created a level of trust	LP systems were boosted the most due to subsidy, installed thousands of those. With conversions, subsidy was 40% of the cost, so demand was boosted. Rebate boosted sales but not sustainable as it produces an artificial demand. Programme impact was more beneficial in the residential sector. With 15% increase, there should be high uptake with commercial enquiries	Impact was highest in residential sector and nothing from commercial. Due to marketing and need to be accredited, so the customers were reassured that they used vetted companies. So there was a validity aspect
<b>Throughout the programme what value has the City's marketing provided to your company? Which marketing mechanism in particular was of use? Can you estimate the percentage of queries received through this platform over its life? Are there still enquiries generated as a result of the programme?</b>	Online platform has been helpful and biggest factor, allowing customers to be aware of the company and products	Rebate provided 50%-80% of business for first 5 years (20-30 applications a month). Customers not value (60% from rebate). The accreditation logo/stamp was great. Green building display (not a lot of calls coming from there). Homemakers stand was fun and worked well. Going forward City to provide guidance and advice, post interesting articles and continue building the brand of solar	Created good value, but also a lot of competition. Marketing effort created a lot of enquiries, through flyers and website. Enquiries not really coming through from programme. Company has been around for a while and receives a lot of recurrent clients and through word of mouth	Best marketing was the rates bill insert
<b>Do you feel that the Solar Water Heater Programme has provided a mechanism to develop greater trust and quality assurance in the technology and the installers for customers?</b>	Yes. Also, in the network it was helpful in that there were options for customers wherever they lived. Not dedicated to one place	Definitely	Definitely. Client could see an existing process where installer can be called back to fix their installation through site inspections. There were shocking installations and unfortunately city could not cover all the bases and could not monitor	Due to marketing and need to be accredited, so the customers were reassured that they used vetted companies. So there was a validity aspect
<b>Is there still a need to provide a mechanism to improve customer's trust in installers and provide quality assurance?</b>	Market has developed itself. Not so much about confidence, but finding something that works for your budget.	A lot of business is coming through from word of mouth, however it is always good to have website where people can go to companies that have been in the programme that they can trust		There is still a market for people to be assured and feel comfortable in going with a company
<b>What other accreditations do you have for your company/installations (current/future), ISO, other industry bodies, etc.?</b>	PIRB	PV Greencard, IDP, CoCT, SAAEA (in pipeline)	PV GreenCard, electrical compliance with the board, working with engineers to sign off installations, SAPVIA, SESA (while mostly in SWH business). Nothing more in the pipeline	SESA (not much use), international solar energy society, CoCT
<b>What's your biggest challenge right now in terms of sales? How has this changed over the past 10 years?</b>	Gone back to manufacturers to inform them the products are not affordable to the market. Provided options to pair different manufacturers to get costs down and get better efficiency. Also getting new products to go to market. Biggest challenge lies in costs but not so much for new developments as it is worked into the cost	Expensive market, barriers to entry is finance	Technical challenges- systems need to be within constraints on NERSA, it is hard to navigate around the constraints it of design. It is also a high skilled sector and it takes time and resources to generate quotes. Cost factor is also a factor. PV prices have been going down, but for the first time ever it has been going up (10%) due to shortage of panels (possibly covid reasons). SWH has a certain place in the market, for people who can invest high capital outlays, there is a specific that can look into it. Eg townhouses	Getting the word out there is the challenge. After programme went silent so had to find replacement- search engine optimiser (get 70% business from this). 30% from referrals. Rebate removed, slashing sales from between 30%-40% to 10%-20%. Cost factor reduced demand
<b>What are the biggest opportunities you see in terms of your growth in sales? Are there specific sectors where you are currently seeing growth or expecting growth?</b>	Growth and opportunities new housing developments, low cost housing. More growth in residential sector than other sectors.	Opportunities in industry because of loadshedding. As well as residential (mostly through incentives). Connect banks to industry	Growth in the commercial market (due to latest 15% increase), the payback is currently appealing, tax incentive is good for commercial. For thermal there is uptake in underfloor heating using heatpumps. Solar and heatpump combination is picking up	No growth in SWH, there is an opportunity with rebates similar to Eskom rebate. Growth in PV. Cost factor creates barrier and less demand as it is not the most cost efficient tech at this time.
<b>What role do you believe the City of Cape Town should be taking to support greater adoption of alternative energy and energy efficiency measures in the residential market, especially for existing buildings?</b>	City to be in forefront of making their buildings EE, also in rental stock similar to Steenberg Villas. Find a product that works (energy and cost savings), and advise City customers based on that investigation	Drive awareness	City has improved in the SSEG registration process. For SWH, City could generate more awareness	City needs to be out there, public and visible. Get website up and running, and update. Marketing wise, the best the city can do is rates inserts in bills about the programme.
<b>Any other comments or questions?</b>	Will share info of product their working on/investigating (element)	Keep in touch, involved and keep the list.	What are the timelines and deliverables for evaluation? Response: beginning stages to do a neat analysis on the gaps, improve the programmes and apply appropriate resources where required.	Get the programme up and running again. Stay in contact
	ASP 5	ASP 6	ASP 7	ASP 8
<b>How are things going overall – sales, marketing, and enquiries – as a general snapshot assessment of the market out there right now?</b>	Business changed and shifted away from SWH and onto other models. SWH demand has reduced drastically, reduced the marketing as well. There are occasional phonecalls re the programme about once or twice a month. After Eskom rebate, there was a reduction in SWH demand. Products have not evolved in SWH as much, has pretty much stayed the same through the years as opposed to geyser controllers. There is a reduction other than in the replacement market. SWH is still the most efficient way to heat water but because PV prices have gone down, customers prefer the affordable route as they also make use of tax incentive.	Focus on developers as they still went ahead during Covid. Conversely, households have slowed down. People currently don't have money to invest. Generally the market is slow at the moment. Moved into photovoltaic geyser heaters	Not doing much marketing, doing word of mouth. Turnover 80% solar electricity, 15% SWH, 5% repairs and others. Shifted from SWH to PV. SWH has gone down because the people who want it, cannot afford and those that can afford have already done it. No demand. There was a water crisis. Leads came through from programme however no success in getting contracts and sales. The benefit with the accreditation and association did not generate much success.	Incredibly busy, highest sale levels since 2006. Possibly due to lower interest rates, loans are cheap. Cape Town specific sales about a third of national sales. Developers creating a demand, people are able to afford housing due to low interest rates. Uptake in upper income because it provides good ROI and energy security. Swimming pool heating equipment and solar heat pumps are seeing more uptake possibly due to lockdown, people spending more time at home.
<b>Throughout the programme what impact has the City's Solar Water Heater Programme provided to the market in general and to your company, in particular, and have there been sectors where this impact has been higher?</b>	Programme created a lot of awareness, found people wanting to go green but did not know where to start. Being associated with the city was valuable and added a lot of credibility to the company. Rates bill insert was very valuable and generated interest. TV and radio had little value. No interest from business and body corp side	Did not bring too many sales but instead only credibility was attached to the company. Many leads were keen on the tech, but not keen to pay. People were expecting a rebate or incentive from the City. There was pricing competition between ASPs.	Stats show they had their own enquiries outside the programme. The city has potential with existing customers, however the leads were not qualified (mostly quantity over quality). Much time commitments and resources were spent in generating quotes with no success.	Not a major impact. Installers complained that leads were weak. It was mostly confused people calling to find out more info. Programme provided awareness and education which was the biggest impact.

Throughout the programme what value has the City's marketing provided to your company? Which marketing mechanism in particular was of use? Can you estimate the percentage of enquiries received through this platform over its life? Are there still enquiries generated as a result of the programme?	Rates bill insert was very valuable and generated interest. TV and radio had little value. Website was also very valuable (although a better and easier platform could have been developed. Served it's purpose at the time. There is still room for improvement). There is limited enquiries being generated to date	Flyers attached to municipal account with the list of installers was very useful. No longer getting any enquiries. Report (online CRM tool Bluewave) shows 600 quotes and 88 sales/installations (throughout the whole programme). Leads less qualified from website.	No queries from City. Most queries were generated during the open days on the stands and exhibits (face to face engagements)	Difficult to measure enquiries from City portal and to link phonecalls to the website. Rates bills was useful
Do you feel that the Solar Water Heater Programme has provided a mechanism to develop greater trust and quality assurance in the technology and the installers for customers?	Yes. Ensured that installations were done properly, provided an outlet for customers to report and complain where required.	Definitely. Provided protection from bakkie brigade through the logo/stamp therefore customers trusted the ASPs more	No. Created awareness but not about quality	People don't trust what government says. However the information being out there constantly creates an interest and awareness
Is there still a need to provide a mechanism to improve customer's trust in installers and provide quality assurance?	Yes there is still a need. CityPlumbing has branched to another company called HomeAssist that provides these services for customers, and it is important for customers to feel reassured and establish a trust	Useful to give customers peace of mind. Customers always want the reassurance	When trust is lost, it is hard to get back. Getting trust back is through money by providing incentives. Incentives could be done through electricity bill in portions to reward energy savings	Consumer Protection Act plays a role, accreditation not the best role for the City. City does not necessarily create a great assurance
What other accreditations do you have for your company/installations (current/future), ISO, other industry bodies, etc.?	PIRB. Prev with SESSA but don't use any more as not in SWH space. Leads are passed onto other companies	PIRB, national credit regulator (rent out their systems), used to be with SESSA (not sue if still accredited)	PIRB, PV Greencards. No associations or accreditations in pipeline	
What's your biggest challenge right now in terms of sales? How has this changed over the past 10 years?	No great funding mechanisms for affordability. Funding is the biggest hurdle	Challenge is they can always do more. A big worry in the industry as a whole. Developers are biggest business however will stagnate if the housing units are not sold.	Covid. Payment behavior (lack of payment) of end users. Price increase makes affordability a challenge. Bakkie brigade. ASPs were up against those that did not need to do due diligence. SWH gets bad reputation.	
What are the biggest opportunities you see in terms of your growth in sales? Are there specific sectors where you are currently seeing growth or expecting growth?	Growth in PV, smart meter and geyser device space.	Developers provide biggest growth opportunity	Growth in commercial sector - Production companies are investing in solar to cut costs (through solar PV not much from SWH)	
What role do you believe the City of Cape Town should be taking to support greater adoption of alternative energy and energy efficiency measures in the residential market, especially for existing buildings?	City should look at a way to endorse and reward SWH tech. Continue to facilitate and drive customers to tried and tested tech they trust (create use cases). City to create partnerships with banks and other funders or departments to improve funding mechanisms as well as other innovative finance mechanisms	Regulatory reforms encouraging uptake. Encourage using rates bill	Retrofits in City owned buildings provide opportunities for education. City can train people (plumbers, engineers) to do installations in a quality manner. Regulatory reform. Scholarships for plumbers and solar specialists	Provide education, could also add the list of companies to contact
Any other comments or questions?	None, all is covered. City standpoint would be great to test tech and communicate success cases.	Reinstate website where people can log their details (ASPs no longer have access to long on and get the leads)	Good luck	
	<b>ASP 9</b>	<b>ASP 10</b>		
How are things going overall – sales, marketing, and enquiries – as a general snapshot assessment of the market out there right now?	Uptake for existing homes is less compared to new developments from developers, driven by legislation. Sales haven't grown much, just seen a market change/shift	Sales are up and down, currently there are price increases due to increase of products and component parts (copper). Systems are however being sold, developers, replacement of geysers and new legislation allows for sales. Shifting towards solar PV in recent years due to demand		
Throughout the programme what impact has the City's Solar Water Heater Programme provided to the market in general and to your company, in particular, and have there been sectors where this impact has been higher?	Low impact in commercial and industrial, no sales although scope is big. Benefit from marketing through rates bill in the residential side. Increase in sale was due to increase in trust. PV is currently a trend where most sales are seen.	No leads in last two years however the City logo carries weight as a plus factor. Biggest players are accredited with the City		
Throughout the programme what value has the City's marketing provided to your company? Which marketing mechanism in particular was of use? Can you estimate the percentage of enquiries received through this platform over its life? Are there still enquiries generated as a result of the programme?	Do not receive enquiries from City website. Rates bill insert was the best mechanism, saw a massive increase in enquiries (10%-20% turned into sales) as well as website although not user friendly (to much information. The long list should have been tailored to the area/location of customers). Created price competition among ASP list.	No enquiries in last 2 years, however at the time of the programme the website was useful and effective in generating leads.		
Do you feel that the Solar Water Heater Programme has provided a mechanism to develop greater trust and quality assurance in the technology and the installers for customers?	As mentioned there are many new players that come and go with all sorts of solutions some the same as what's on offer and some that are quite different and many of these new providers either sell inferior products or make unrealistic claims so the industry is going to go back to the way it was with a bad name and trust issues where potential customer doesn't know what product to choose further more the City is allowing all sorts of unproven solutions to be accepted by inspectors and a lot of these to my knowledge don't have any proof of performance or safety for that matter. These new solutions are becoming a lot more popular by installers as they don't need to sign a plumbing COC for them so they can avoid the PIRB	Yes, the ASP list was a go to for customers as the programme ensured compliance and assurance of installations		
Is there still a need to provide a mechanism to improve customer's trust in installers and provide quality assurance?		The more a customer uses a company, the more trust they develop. The programme is a mechanism that can be used to back the company, instilling more trust in the customer.		
What other accreditations do you have for your company/installations (current/future), ISO, other industry bodies, etc.?	SABS, NRCS, SESSA (membership dwindled-not much use), PIRB	CCT, SESSA, (partner electrical engineer accredited with PV Greencard )		

<p><b>What's your biggest challenge right now in terms of sales? How has this changed over the past 10 years?</b></p>	<p>Existing residential buildings have been the industries focus for many years so not sure there is much that can be done other than possibly another round of rates inserts but as mentioned before we can have customers going to a website and seeing 5 or 10 companies to choose from each time as that juts causes a pricing war as customers get 10 quotes and take the cheapest one so I don't think any of the ASPs are keen to get involved a pricing war and work for free which is what eventually happened last time we had rates inserts I am pretty sure eventually no one was quoting any more as it want worth doing 10 quotes and in many cases not getting a single order. As mentioned there are many new players that come and go with all sorts of solutions some the same as what's on offer and some that are quite different and many of these new providers either sell inferior products or make unrealistic claims so the industry is going to go back to the way it was with a bad name and trust issues where potential customer doesn't know what product to choose further more the City is allowing all sorts of unproven solutions to be accepted by inspectors and a lot of these to my knowledge don't have any proof of performance or safety for that matter. These new solutions are becoming a lot more popular by installers as they don't need to sign a plumbing COC for them so they can avoid the PIRB</p>	<p>Cost factor is a barrier, however customers make the necessary investment as they are given value for money.</p>
<p><b>What are the biggest opportunities you see in terms of your growth in sales? Are there specific sectors where you are currently seeing growth or expecting growth?</b></p>	<p>As mentioned I believe the best area for growth is the industrial commercial and hotel sector as these haven't been targeted nor does this sector even know in most cases that they could use a combination of solar water heating and either elements or heat pumps. In most cases heat pumps are used which is more efficient than elements but comes with all the servicing etc. A hybrid system could give the best overall saving. So possibly some sort of campaign by the city to educate these users so they started making enquiries. One large factory could reduce carbon footprint way more than many domestic installations and I think the domestic sector has already had a fair bit of work doe to make sales might be time to move focus to another sector.</p>	<p>Growth in residential sector, commercial not as constant however has much potential. Growth in developments in low cost housing.</p>
<p><b>What role do you believe the City of Cape Town should be taking to support greater adoption of alternative energy and energy efficiency measures in the residential market, especially for existing buildings?</b></p>		<p>Market low carbon technologies more. Streamline SSEG registration/applications</p>
<p><b>Any other comments or questions?</b></p>	<p>Good luck and lets hope we can all continue to work towards a better future for All</p>	<p>Is the programme starting again?</p>

<p>1. What is your role/current engagement in the residential energy market?</p>			
<p>2. How do you currently engage with solar water heater/solar thermal installers in the market?</p>	<p>Not directly often, mainly through research</p>	<p>was involved in the Eskom rebate programme.</p>	<p>Not directly</p>
<p>3. What do you know about the City of Cape Town's Solar Water Heater Accredited Service Provider programme?</p>		<p>N/A</p>	<p>N/A</p>
<p>4. What benefit(s) do you believe the market derived from the Solar Water Heater Accredited Service Providers Programme or other similar accreditation programmes?</p>	<p>Not sure of any specific benefit derived - unsure as to whether customers/homeowners put weight on an accreditation or rather recommendation and word-of-mouth</p>	<p>N/A</p>	<p>N/A</p>
<p>5. What are the current challenges being faced in the solar water heating market/industry? How has this changed over the past 10 years?</p>	<p>Seeing more PV direct systems, where PV generated electricity is wired to geysers in homes, especially for multi-unit buildings - this limits the loss of energy through pipes and the transfer of water around buildings, so is a good alternative, but it is not explicitly covered by SANS 10400-XA and therefore is questionable whether these systems meet the minimum 50% requirement. CCT has interpreted SANS 10400-XA to include gas heaters - it is questionable whether this is in line with the spirit of the regs - this needs to be bolstered in the SANS 10400-XA update to limit heating of water from fossil fuel sources Insurance companies do offer the option for homeowners to switch to SWHs, but this takes longer than replacing a regular electrical geyser - due to needing specialist plumbing skills and parts availability - this can limit uptake of SWHs as after a geyser has burst is not necessarily the best time for change in decision-making Need to understand more deeply what drives customer decision-making regarding not know what product to choose further more the City is allowing all sorts</p>	<p>ESKOM stimulated supply and not demand and the rebate programme became a social programme for low income households relying on low pressure systems - led to technical failures The technology of SWHs has a rightful place in the market, but there has been little to no advancement of the technology over the past few years. SANS no longer tests SWH technology + 70% local content requirement + reduced advertising = lower interest among customers Customer perception has weakened due to numerous fraud cases and supplier in-fighting. Loadshedding and the drought impacted on the financial case for solar water heating. Commercial scale projects - SWH + Solar Thermal - SOLTRAIN research on this - SANEDI stopped getting involved in the residential market Heat pumps get varied results</p>	<p>Energy efficiency requires constant monitoring which makes it difficult. The transition is going to happen so it must be managed. The current insurance model is profitable and therefore difficult to shift or change. When a geyser bursts, households want hot water as soon as possible, so switching to SWH at that point through insurance schemes can be difficult as it can take longer for a SWH installation (a few days, rather than one day). Price difference between SWH and conventional geyser is a hindrance for households. For the financing this needs to be added to the house bond.</p>
<p>6. What are the key opportunities to take hold of in the solar water heating and/or alternative energy market at present? While the City's programme is focused on the residential sector, are there additional opportunities for solar thermal in the commercial (hotel) and industrial sectors?</p>	<p>SANS 10400-XA require the installation of SWH or heat pumps has been a big plus for the increase in installations. Update SANS 10400-XA to limit all fossil fuel use for water heating.</p>		<p>With the requirement for increased insulation and now efficiency of geysers, we have reached a limit in terms of their energy saving potential, especially in terms of return on investment. Rather require a shift to a different technology to see another big shift in hot water energy consumption - SWHs are a store of solar energy. International case study (not sure which country): use of a tax rebate was more effective to stimulate demand for SWHs than the Eskom rebate programme which did more to stimulate supply.</p>
<p>7. What role do you believe the City of Cape Town should be taking to support greater adoption of alternative energy and energy efficiency measures in the residential market, especially for existing buildings?</p>	<p>Awareness is critical and teaching customers about what SWH systems look like (physically) and their benefits and maintenance requirements in comparison to electrical geysers is key - need to understand decision-making process regarding geysers in homes and provide the data and relevant decision-making support, such as total cost assessment tools, to help customers. People aren't aware of their electricity bill at times, let alone the % of their electricity that only goes to water heating. The City could make customers more aware of this.</p>	<p>Municipalities should drive demonstrations and awareness of SWHs Continue the discussion with insurance companies re: replacements Go for an A-rated electrical geyser when you need to replace - at the minimum</p>	<p>It is critical that municipalities enforce SANS 10400-XA - important to ensure As Built compliance too. Incentive programmes should be a mechanism of last resort as they can distort the market, such as with the Eskom rebate - especially at the point of withdrawal of the incentive. Munics should use economic nudge principles: share information and soft approaches, reflect data back to citizens, e.g. water consumption mechanism during the drought</p>
<p>1. What is your role/current engagement in the residential energy market?</p>			
<p>2. How do you currently engage with solar water heater/solar thermal installers in the market?</p>			
<p>3. What do you know about the City of Cape Town's Solar Water Heater Accredited Service Provider programme?</p>	<p>Not aware of the programme</p>	<p>Not aware of the programme</p>	<p>N/A</p>

<p>4. What benefit(s) do you believe the market derived from the Solar Water Heater Accredited Service Providers Programme or other similar accreditation programmes?</p>	<p>N/A</p>	<p>The opportunity is always there, but it comes at a cost                  Could look at spreading out the cost                  There needs to be a holistic approach to residential energy demand management, not only SWHs                  The City of Cape Town wants to sell electricity to customers and customers want to sell electricity to the grid - so there are bi-directional benefits and opportunities.                  In insurance sector, prevention is better than cure, so there is an imperative for insurers to due waht can be done to drive down the liekelihood of risk and therefore the cost of insurance for customers. In residential energy market, this could look like early warning systems for appliance failure, where geysers have a device that sends a notification of failure message to home owners before the geyser physically bursts, thereby limiting additional damage.</p>	
<p>5. What are the current challenges being faced in the solar water heating market/industry? How has this changed over the past 10 years?</p>	<p>The market has been killed. Solar is now only associated with PV and no longer with solar water heating.                  There is a big need to increase customer awareness and understanding of solar water heaters - used to be a national initiative supported by country-wide comms, but this has stopped.                  Suspected reasons for decline of support for SWHs from national government: focus on large scale IPP procurement at the policy level and from the financial sector over smaller scale interventions.                  Also, with the Eskom rebate programme there were challenges when the it switched to being one of social development (service provision) rather than electricity demand reduction - not saving any electricity by connecting households that don't have hot water.                  Also, the technical challenge sof installing in lower income neighbourhoods with low pressure systems and higher occupancies than the systems were designed for then dominated the narative around the success for SWHs.                  When Sessa has engaged with banks, they are not really interested in financing the R30 000 per SWH, rather focusing on higher finance PV systems or IPPs. The problem is accessing finance for the roll-out - not selling the product to customers.</p>	<p>The price differential between electric and solar is still prohibitive.                  Eskom rebate programme saw a marginal increased uptake of SWH installation, so ultimately not enough impact to be considered effective.                  How can we as a collective cross the hurdle of affordability at the point of replacement? This is a gap that needs to be bridged.                  - Can it be spread out to make it more affordable? Yes, but then the issue of contracting with the client for the full payback period would be a concern                  Once people move over to PV, SWH is not necessarily useful as not all PV is used during the day so this energy can be directed to water heating as a form of storage - so cost benefit of SWH may not be as viable. As the Internet of Things/SmartHome concept expands, more households will be able to schedule their appliances outside of peak demand and within peak production times.</p>	<p>SANS PV installation standards are still in development, making it difficult, costly and time-intensive to install PV as each project has to establish installation standards practically                  Prices of PV systems vary considerably - R35 000 to R90 000 for 3kW system and not sure why this is:                  - could be due to equipment costs or being a new entrant to the market                  - data not clear on whether system is PV or PV + Storage                  Skills development is still a critical need and installers need to be regulated at the national level to weed out unscrupulous installers, with an oversight/ombudsman function needed - looking for Dept. of Labour to hold this as they currently have oversight of electrical installations</p>
<p>6. What are the key opportunities to take hold of in the solar water heating and/or alternative energy market at present? While the City's programme is focused on the residential sector, are there additional opportunities for solar thermal in the commercial (hotel) and industrial sectors?</p>			
<p>7. What role do you believe the City of Cape Town should be taking to support greater adoption of alternative energy and energy efficiency measures in the residential market, especially for existing buildings?</p>			<p>City could support the development of pricing benchmarks to assist customers in decision-making</p>



CITY OF CAPE TOWN  
ISIXEKO SASEKAPA  
STAD KAAPSTAD

ENERGY DIRECTORATE

Mary Haw  
Manager: Renewable Energy & Energy Efficiency  
Facilitation and Promotion

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DATE: 09 FEBRUARY 2022  
TO: LEILA MAHOMED WEIDEMAN

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## UPDATE ON THE LET'S ACT. FOR A STRONGER CAPE TOWN CAMPAIGN

Dear Leila,

This memo serves to provide you with an update on the status of the *Let's ACT. For a stronger Cape Town platform.*

Guided by the findings of the climate change perception study, in March 2021 the City launched its climate change response and resilience communications campaign: *Let's ACT. For a stronger Cape Town.* The platform will act as the umbrella for all the City's projects and communications in support of the goal of being carbon neutral and climate resilient by 2050. Sustainable Energy Markets has a number of projects which could fall under *Let's ACT* campaign, including driving awareness and uptake of new, sustainable energy innovations and technologies, and public communications campaigns around sustainable living

In terms of the communications campaign, the focus is on enabling and supporting both residents, communities, businesses and organisations to take action for a stronger, healthier and more resilient Cape Town for all. The roll out of the campaign has begun in phases, kick-starting with Earth Hour on 27 March 2021. Campaign placements include videos, media releases, social media posts and mainstream media collateral (such as newspaper ads). These have focused on establishing *Let's ACT* as a campaign and educating Capetonians on what climate change is, what the City of Cape Town is doing and the opportunities we have in our own lives to make a difference. Much of the content is focused on educating citizens and identifying actions they can take in their own lives that, collectively, can make a positive impact.

The projects within SEM that have been included under the *Let's ACT* umbrella include enabling mobility through the City's free solar-powered, EV Chargers and promoting net zero carbon living through the Building Centre exhibition and the My Clean Green Home show home. As more projects are developed within the Department which focus on enabling sustainable energy decisions by Capetonians in meeting the 2050 goal, they will be included under *Let's ACT*.

The campaign is closely monitored and adapted based on high performing posts and events that are happening (eg linking high heat days to climate resilience). Furthermore, the feedback and results from the campaign are largely positive and show good coverage and engagement. Now that *Let's ACT* is established, there is a process underway for Corporate Communications Department to take more of a leading role in content development and engaging with other relevant departments

to share information, education and case studies from their work that relates to climate change response and resilience. SEM will continue to develop ideas and content primarily related to energy and the work that we are engaged in.

Please don't hesitate to contact me should you require further details.



Mary Haw  
Manager: Renewable Energy & Energy Efficiency Facilitation and Promotion  
Sustainable Energy Markets  
Date: 9 Feb 2022



### Project Closeout Report

Approval of the Project Closeout and Assessment Report indicates an understanding and formal agreement that the project is ready to be closed. By signing this document, each individual agrees all administrative, financial, and logistical aspects of the project should be concluded, executed, and documented as described herein.

Approver Name	Title	Signature	Date
Leila Mahomed Weideman	Director: Sustainable Energy Markets Department		12 April 2022

#### Section 1. General Information

Project Name			
The City of Cape Town's Residential Solar Water Heater Accreditation Programme (CCT SWH Programme)			
Project Start Date		Project End Date	
November 2013		February 2022	
Client	Title	Department	Division
Project Manager	Title	Department	Division
██████████ (2012)	SWH Programme Manager	Environmental Resource Management	Economic, Environmental and Spatial Planning
██████████ (2012)	Programme Manager of the SWH PMU – seconded from Sustainable Energy Africa	Environmental Resource Management	Economic, Environmental and Spatial Planning
██████████	Programme Manager	Sustainable Energy Markets	Energy and Climate Change
██████████	Manager – RE&EEPF	Sustainable Energy Markets	Energy and Climate Change

Section 2. Final Deliverable/Deployment Checklist

Respond to each question. For each "no" response, include an issue in Open Issues section.

Item	Question	Response
2.1	Do you agree that the product and/or service is ready to be used? Note: The services of the Accredited Service Provider (ASP) programme have been used and it has now come to a close.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2.2	Do you agree the product and/or service has sufficiently met the stated business goals and objectives?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2.3	Do you fully understand and agree to accept all operational requirements, operational risks, maintenance costs, and other limitations and/or constraints imposed as a result of ongoing operations of the product and/or service?  Note: The project facilitated private customers choosing service providers. The City takes no responsibility for the ongoing operation of these systems.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2.4	Do you agree the project should be closed? If no, please explain:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	<b>Rate your level of satisfaction with regards to the project outcomes listed below</b>	
2.5	Project Quality	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2.6	Product and/or Service Performance	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2.7	Scope	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2.8	Cost (Budget)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2.9	Schedule	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Section 3. Project Documentation Checklist

Respond to each question. For each "no" response, include an issue in Open Issues section.

Item	Question	Response	
3.1	Have project documentation and other items (e.g., Business Case, Project Plan, Charter, Budget Documents, Status Reports) been prepared, collected, filed, and/or disposed?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
3.3	Were audits (e.g., project closeout audit) completed and results documented for future reference?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
3.4	Identify the storage location for the following project documents items:		
Item	Document	Location (SharePoint location)	Format

3.4a	Business Case	<ol style="list-style-type: none"> <li>1. Economic Analysis of the City of Cape Town Solar Water Heater Programme – <a href="#">Link</a></li> <li>2. CCT SWH Programme Market Research Report 2013_06_20 – <a href="#">Link</a></li> </ol>	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4b	Project Charter	<ol style="list-style-type: none"> <li>1. City Of Cape Town Solar Water Heater Programme - Report On Status And Way Forward – <a href="#">Link</a></li> <li>2. CCT SWH Criteria MayCo report 2013 – <a href="#">Link</a></li> </ol>	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4c	Project Plan	<a href="http://teamsites.capetown.gov.za/sites/refacil/ layouts/15/WopiFrame.aspx?sourcedoc={973E9E98-2137-4478-9095-BEB7A4096DAC}&amp;file=Mayco%20SWH%20report%20April%20v7_for%20Exec%20Mayor.doc&amp;action=default">http://teamsites.capetown.gov.za/sites/refacil/ layouts/15/WopiFrame.aspx?sourcedoc={973E9E98-2137-4478-9095-BEB7A4096DAC}&amp;file=Mayco%20SWH%20report%20April%20v7_for%20Exec%20Mayor.doc&amp;action=default</a>	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4d	Budget Documentation and Invoices	<ol style="list-style-type: none"> <li>1. Budget Spreadsheet 2017-2018 - <a href="#">Link</a></li> </ol>	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4e	Status Reports	<ol style="list-style-type: none"> <li>1. SWH Programme Progress Reports Folder - <a href="#">Link</a></li> </ol>	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4f	Risks and Issues Log		<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4g	Final deliverable	<ol style="list-style-type: none"> <li>1. SWH Final Progress Report <a href="#">link</a></li> <li>2. Website page loads <a href="#">link</a></li> <li>3. Project Close out process <a href="#">link</a></li> </ol>	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4h	If applicable, verify that final project deliverable for the project is attached or storage location is identified in 3.4.		

## Section 4. Project Team

List resources specified in the Project Plan and used by the project.

Name	Role	Type (e.g., Contractor, Employee)
CCT SWH Programme Management Unit	Team Directory – <a href="#">Link</a> Prepared 2017	
██████████	Principal Engineer	Employee
██████████	Energy Efficiency Strategist	Employee
██████████	Principal Engineer	PMU- Sustainable Energy Africa
██████████	Programme Manager of the SWH PMU	PMU- Sustainable Energy Africa
██████████	Section Head	Employee
██████████	Sustainable Energy Assistant	Employee
██████████	Programme Manager Energy Efficiency	Employee

## Section 5. Post-Implementation Support Plans

Identify plans for post-implementation activities after project closeout. Refer to the Benefits Realization review gate for information about the Post-Implementation Review of Business Outcomes deliverable.

Action	Planned Date	Assigned To	Frequency
Post-Implementation Review of Business Outcomes (actual review): <b>Note:</b> Closeout process included interviews with ASPs to determine outcomes for the individual businesses as well as industry experts to understand the impact on the wider industry.	Aug – Oct 2021	██████████ ██████████	Completed <a href="#">link</a>
Post-Implementation Review of Business Outcomes (approval)	Oct 2021	██████████ ██████████ ██████████	Approved

## Section 6. Open Issues

Describe any open issues and plans for resolution within the context of project closeout. Include an open issue for any "no" responses in the Final Product and/or Service Acceptance Checklist and the Project Artefacts Checklist sections.

Issue	Planned Resolution
Internal capacity constraints	<ul style="list-style-type: none"> <li>- It is proposed that the City's involvement in the SWH industry be in the general marketing of the technology through a more technology agnostic and comprehensive programme/ communications campaign such as Let's Act campaign or NZC existing buildings programme which encompasses a suite of projects/programme.</li> </ul>
Reduced demand	<ul style="list-style-type: none"> <li>- Much of the recent growth in the SWH industry is in new developments. This is largely due to the changes in the National Building Regulations which is a regulatory requirement that new buildings and extensions of buildings are to be designed and constructed in accordance with SANS 10400 Part XA - Energy Usage in Buildings (SANS 10400 - XA). Part XA2 (2011): Energy usage in buildings specifies that at least 50% by volume of the annual average hot water heating requirement shall be provided by means other than electrical resistance heating, including – but not limited to – solar heating, heat pumps, heat recovery from other systems or processes and renewable combustible fuel.</li> <li>- There has also been a greater adoption of alternative heating technologies such as heat pumps and photovoltaic systems compared with SWHs in the past few years due to the advancements in technology and lowering of costs with these technologies.</li> <li>- The drought in Cape Town significantly reduced the residential hot water demand, thereby impacting on the financial viability of investments for existing home owners.</li> </ul>