#### **ENERGY DIRECTORATE**



**Kadri Nassiep** Executive Director: Energy

T: +27 21 400 5143

E: Kadri Nassien@capetown.gov.za

## **MEMORANDUM**

Date:

4 September 2023

To:

City Manager

Subject:

Trip Feedback report for international trips: Shane Prins RES4Africa ATC Milan

November 2022- late report

The attached trip feedback report dated 12 December 2022 has reference.

The manager Generation Development and Municipal Energy Efficiency attended the RES4Africa Advanced Training Course in Milan, Italy in November 2022.

A trip feedback report was submitted to the office of the Executive Director on 14 December 2022 for submission and inclusion on the Mayco agenda for January 2023.

Due to an administrative oversight, the report was not processed for ED approval since the official responsible for processing the report was about to proceed on annual leave in December 2022 and only returned to the office on 16 January 2023. The official was then booked off sick for 7 weeks between February and March 2023. No handover or follow-up was completed and subsequently the report was not submitted for further approval.

Once the oversight came to light, appropriate and immediate corrective action was implemented against the responsible official and an informal counselling session was concluded.

The attached report is now submitted for further approval and onward submission to Mayco.

Yours sincerely,

Mr. Kadri M Nassiep

Executive Director: Energy



REPORT TO: CITY MANAGER

TO BE REFERRED BY THE OFFICIAL TO MAYCO VIA THE RELEVANT ENERGY

PORTFOLIO COMMITTEE SECTION 79 COMMITTEE [AFTER CONSIDERATION BY CITY

MANAGER1

[OFFICIALS TRAVELLING OVERSEAS FOR COUNCIL RELATED ACTIVITIES]

## 1. ITEM NUMBER

## 2. SUBJECT

FEEDBACK ON THE INTERNATIONAL/OUTSIDE THE BORDERS OF THE RSA TRIP UNDERTAKEN FROM 18 NOVEMBER 2022 TO 3 DECEMBER 2022 TO ATTEND THE RES4AFRICA ADVANCED TRAINING COURSE IN MILAN, ITALY

## **ONDERWERP**

TERUGVOERING OOR DIE INTERNASIONALE REIS (BUITE DIE GRENSE VAN DIE RSA) VAN 18 NOVEMBER 2022 TOT 3 DESEMBER 2022 VIR DIE BYWONING VAN DIE RES4AFRICA- GEVORDERDE OPLEIDINGSKURSUS IN MILAAN, ITALIË

## ISIHLOKO

INGXELO ENGOHAMBO OLUYA PHESHEYA OKANYE NGAPHAYA KWEEBHODA ZOMZANTSI AFRIKA OLUTHATYATHWE UKUSUSELA NGOWE18 KWEYENKANGA 2022 UKUYA KOWE3 KWEYOMNGA 2022 LOKUZIMASA IZIFUNDO ZOQEQESHO OLUPHUCULIWEYO LWERES4AFRICA EMILAN, ITALY

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# 3. EVENT SUMMARY

EVENT DETAILS		
CONFERENCE/SEMINAR	RES4Africa Advanced Training Course	
OTHER	Attending of advanced training course on renewabel energy technologies, integration and financing	
DATE	10 days	
VENUE	Polimi Graduate School of Management, Milan, Italy     Bocconi University, Milan, Italy	
TOTAL COST TO THE CITY	R29 276.59	
CITY	Milan	
COUNTRY	Italy	

Making progress possible. Together.

DESIGNATION
MANAGER: GENERATION DEVELOPMENT AND MUNICIPAL ENERGY EFFICIENCY
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PROVIDE SUMMARY OF HOST ORGANISATION / CITY

RES4Africa Foundation is a non-profitable foundation, whose purpose is to promote the dialogue with key stakeholders from Southern and Eastern Mediterranean countries. The association is currently widening the scope of its activity through the RES4Africa Project to Sub-Saharan Africa.

## 4. OBJECTIVE

RES4Africa Foundation arranged a two weeks Advanced Training course (ATC) in partnership with Enel Foundation, Politecnico di Milano and Bocconi University. The course was primarily addressed to middle managers with an appropriate seniority, selected among public institutions, energy companies, energy centers, universities and research agencies operating in the Mediterranean basin and in Sub-Saharan Africa.

The Advanced Training Course covered a broad range of topics highly relevant to the City's transition towards sustainable energy use. The course covered topics from both an energy procurement, as well as own-build generation perspective. Technical issues, commercial considerations and financing of projects within the changing international energy landscape was explored in-depth.

## 5. OUTCOMES

The transition to an energy secure and resilient City will create further opportunities for economic growth and jobs within the City. Balancing this transition and maximizing the potential benefits related to renewable energy roll-out and additional generation capacity will be valuable learnings obtained from the training provided by RES4Africa. City will benefit from the learnings as part of the Advanced Training Course in structuring our response to the energy transition, both locally and internationally.

The City has embarked on a strategic drive towards energy security, the use of sustainable energy technologies and the creation of opportunities for economic growth. This knowledge exchange through a sponsored training course with international experts and utility executives will enhance the ability of Cape Town to consider and implement learnings related to the energy transition, utilisation of existing power generation technologies and the optimal creation of economic opportunities for its citizens.

Some of the learnings obtained at the 10day course:

- Out of total global RE capacity deployed over the past decade, only 2% has been in Africa.
- It is foreseen that both oil and gas demand will start to decrease over the next decade, leading to lower investment and availability of the fossil fuels.
- Africa possesses a significant wind energy resource, able to meet continental electricity demand many times over.

- Four phases of VRE integration can be identified according to penetration and resulting effort and costs for the system to accommodate this integration.
   These are:
  - o Phase 1 RE generation not noticeable
  - o Phase 2 Net load changes
  - o Phase 3 Enhanced flexibility required
  - o Phase 4 Possible stability issues
- RE integration challenges can be overcome by selecting the most appropriate technical and optimal economic solutions
- The efficacy of energy efficiency initiatives can be enhanced and its footprint broadened through the use of incentives
- Green Hydrogen will play a key role in the net zero scenario but cannot be the
  only solution. Its best use is to decarbonize those sectors of the economy that
  cannot be easily or economically electrified, e.g. hard-to-abate industries such
  as transport.
- Energy Communities is a very powerful tool to cede control of distributed energy sources to those consumers most directly affected. This is an exciting development and has the potential to be rolled out in the country.
- A Circular Economy is an economy based on the principles of designing out
  waste and pollution by keeping products and materials in use, and maximizing
  the value of resources, thus regenerating natural systems. This principle can
  be employed e.g. in the design, manufacturing and recycling of wind turbines.
- Responding to climate change involves a two- pronged approach:
  - o Mitigation
  - o Adaptation
- It must be noted that the costs associated with adaptation far exceeds that of mitigation, however the actual impact of mitigation is limited.
- An overview of battery energy storage technologies and applications revealed multiple use cases that can be deployed for the benefit of the City, and aligns very well with our current thinking within the Energy Directorate.
- The various commercial options on engaging the market, including through auctions was thoroughly covered, specifically the various pros and cons of closed vs open auctions.
- Project vs Corporate Finance, their applications in financing energy projects and the allocation of risk between the off-taker, lender and IPP was thoroughly expanded upon. The best approach to mitigate risks is to share them among the parties who are the best-placed to efficiently handle them.√
- The electricity grid, as a powerful enabler of decarbonisation, was covered in detail.

# 6. ACTIONS REQUIRED

Application of course learnings in the development and implementation of the City's renewable energy program. The implementation of these various learnings will be driven through the Manager: Generation Development and Municipal Energy Efficiency (GDMEE), as part of Sustainable Energy Markets (SEM) in the Energy Directorate.

7.	IMPLICATIONS			
	7.1	Constitutional and Policy Implications	No √	Yes 🗌

7.2	Environmental implications		No √	Yes 🗌
7.3	Financial Implications		No 🗹	Yes
7.4	Legal Implications		No 🗸	Yes
7.5	5 Staff Implications		No 🗸	Yes
7.6	.6 Risk Implications		No 🗸	Yes
7.7	POP	IA Compliance		
	$\boxtimes$	It is confirmed that this report has be for POPIA Compliance.	en checked an	d considered
		NOTE: POPIA Section MUST be conwill be returned to the author for revis		ise the report
	Contact your Directorate POPIA Stewards should you require assistance.			you require
The City has a contract in place with XL Embassy Travel for the safe- keeping of Traveller's personal information as required by the POPI Act.				
REC	OMME	NDATIONS		
It is recommended that the feedback report on the trip RES4Africa Advanced Training Course undertaken by Shane Marcelo Prins on 18 November 2022 be considered and noted.				
AANBEVELINGS  Daar word aanbeveel die terugvoeringsverslag oor Shane Marcelo Prins se reis vir die bywoning van die RES4Africa- gevorderde opleidingskursus van 18 November 2022 tot 3 Desember 2022 oorweeg word en daarvan kennis geneem word.				
IZINDULULO  Kundululwe ukuba makuthathelwe ingqalelo kwaye kuqwalaselwe ingxelo engohambo oluya kwiZifundo zoQeqesho oluPhuculiweyo lweRES4Africa oluthatyathwe nguShane Marcelo Prins ngowe18 kweyeNkanga 2022 ukuya kowe3 kweyoMnga 2022.				
	P2192 GENERAL DISCUSSION			

8.

9.

None

#### **ANNEXURES** 10.

None

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FOR	FURTHER	DETAILS.	CONTACT:
	1 01/11/11/1		~~

DATE

12 December 2022

CONTACT

NAME

**Shane Marcelo Prins** 

NUMBER

0796970063

E-MAIL ADDRESS

Shane.prins2@capetown.gov.za

FILE REF

DIRECTORATE

Energy

No

n/a

SIGNATURE:

**EXECUTIVE DIRECTOR: ENERGY** 

KADRI NASSIEP

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

COMMENT:

CONDONATED OF LATE

PROCESSING OF TRAVEL REPORT

REGUESTOO

SIGNATURE:

NAME

DATE

MANAGER: INTERNATIONAL RELATIONS

COMMENT:

DR. DENVER VAN SCHALKWYK

SIGNATURE:

DATE

	REPORT COMPLIANT WITH THE PROVISIONS OF COUNCIL'S DELEGATIONS, POLICIES, BY-LAWS AND ALL LEGISLATION RELATING TO THE MATTER UNDER CONSIDERATION.
LEGAL COMPLIANCE	☐ NON-COMPLIANT
	COMMENT:
NAME	Certified as legally compliant based on th
TEL	content of the report.
DATE	
CITY MANAGER	<b>▼</b> Noted
	REFER TO THE MAYORAL COMMITTEE VIA THE RELEVANT SECTION 79 COMMITTEE
DATE	
	COMMENT: