



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Overview of Embedded IPP Procurement Program

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29 March 2022

Making progress possible. **Together.**

Major Drivers for EE and RE Initiatives

- **Energy Security:**

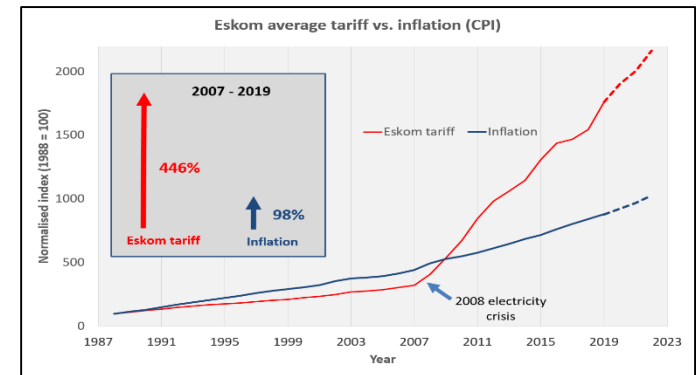
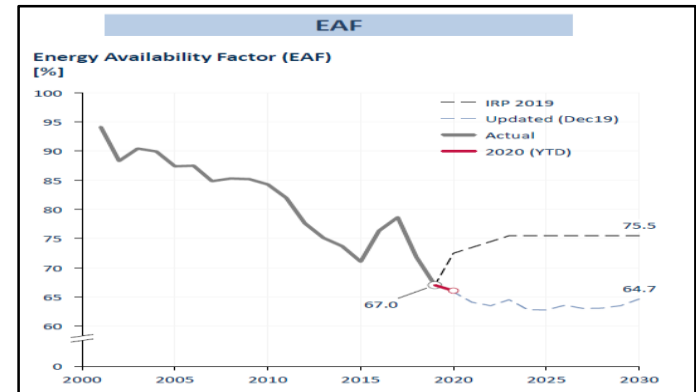
- Eskom performance to regress
- Loadshedding to increase
- Significant impact on economy and citizens

- **Energy Cost Savings:**

- Eskom tariff to continue steep upward trend
- RE cost to decrease over short/medium term
- CoCT Electricity demand decreasing, impacting revenues

- **Green Energy Commitments:**

- Clean Energy for Work Creation - Decreasing dependence on Eskom
- Increasing demand for green services – unlocking “green” markets a strategic move



- **Energy Security is Number 1 Priority of City**
- **Energy must be affordable and accessible**
- **Supply of energy must do no (further) harm**

The broader City power grid decarbonisation programme

IPP Programme

Embedded IPP Programme

- Primarily targeting RE IPP above 5MW connected to City grid
- Current target of 200MW for this bid window
- Less onerous regulatory process due to lifting of licensing exemption threshold
- Market engaged in February 2022
- Option to extend program through successive bid windows

Large IPP
Procurement

IPP Large Scale Programme

- Primarily targeting energy wheeled over Eskom's grid – dispatchability is key
- MW Target not yet defined – maximum to be taken if cost-beneficial over PPA term
- Lifting of licensing threshold can accelerate first power date significantly
- Market to be engaged during FY2022/23
- REIPPP/RMIPPP programs may impact on responses received

Small IPP
Procurement

Introduction of a Wheeling Facility

- Enable 3rd party RE generators to sell energy to City consumers (using the City's electricity grid)
- Purely financial endeavour – not highly technical
- Systems Testing phase – wheeling pilot to be launched in 1st half of 2022

City rooftop and Ground mounted PV programme (less than 10MW)

- City-owned RE generation (rooftop and ground-mounted) to be increased
- Increased uptake of own RE capacity by City departments foreseen
- City Owned Generation Framework & Rules developed
- Supporting Waste to Energy generation(4 sites) and carbon work

Own
Generation

Residential, Commercial and Industrial SSEG program (less than 1MW)

- Investigating innovative financing mechanisms for increased uptake of SSEG
- Installers awareness / compliance campaign
- Assisting with development of an easier online registration process
- Data collection through aerial survey and geo-tagging

Embedded
Generation



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Overview of CoCT Embedded IPP Program

- Targeting “lower carbon energy” IPPs
- Projects to be minimum of 5MW to ease admin burden
- Facilities MUST connect to City grid
- Upper limit per project not defined, but naturally constrained through grid or other technical limitations (max probably 20MW)
- Licensing exemption threshold lifted so IPPs should be able to complete projects faster
- Targeting ~200MW through this bid window, can be expanded through successive bid windows depending on responses received
- RE top prize, other technologies not excluded
- “Dispatchability” preferred, but not explicitly requested now



Overview of CoCT Embedded IPP Program (cont.)

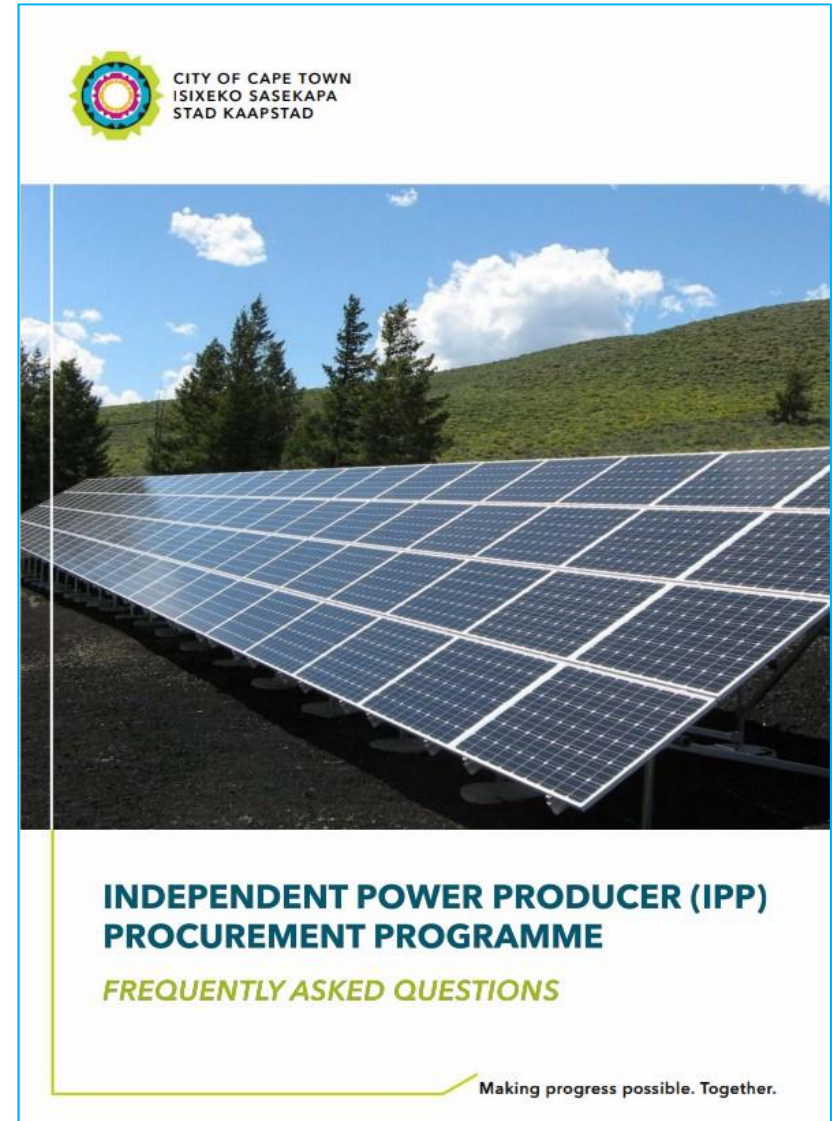
- Market engaged on 16th Feb through competitive tender
- Tender will remain open until 25th May 2022
- Explicit localization requirement not included, but will consider BBBEE in evaluation process
- IPPs will enter into 20year PPA with CoCT
- Bid prices lower than Eskom tariff will be considered only, with CPI escalation
- Significant energy cost benefits foreseen for the City, up to R4Bn over PPA term
- Some regulatory hurdles remain
- National programs run by IPPO may affect responses; high interest expressed so far



Assistance to IPPs

- City has issued online “Information Booklet” to assist IPPs prepare bids
- Contains information on:
 - City’s Energy Directorate
 - Area of Supply Map
 - Substation Locations
 - Substation Spare Capacity
 - Eskom and City tariff structures
 - Contacts

**“Smoothing the Path” for IPPs
could be crucial to program success**



Evaluation Process

- Intent is to keep process as simple as possible
- No special provision made for BWO, BYO, Disabled, etc.
- No ED Scorecard applied
- Aspiration to have new players enter market
- Contract Award will be suspensive upon Section 33 completion – this may add significant time to schedule
- City intends to apply for Section 34 Determination – some legal opinions say not required but we will apply in parallel to running tender process
- Two Stage process to be followed:
 - Technical Evaluation (must meet ALL eligibility criteria)
 - Financial / BEE Based Scoring (90/10 principle) – highest scorers included until 200MW reached

Evaluation Process (cont.)

- **Eligibility Criteria (Stage 1) – Do we have a project?**

- Technical solution must utilise proven technology implemented at utility scale
- Peak output of power plant > 5MW_p AC.
- Proof of land ownership/access for the full duration of the PPA
- Power plant will connect directly to City network
- Maximum instantaneous generation of project must be accommodated by the grid capacity at the chosen point of connection
- Total generation downstream of Eskom in-take feed must not result in export of electricity into Eskom's grid during all foreseen network conditions

City will issue CEL to bidders getting through Stage 1 only (Impact on network losses taken into account)

- **Scoring (Stage 2) – Does the project offer value?**

- Financial bids must be lower than Megaflex

$$P_s = \frac{90 \times (1 - (P_t - P_{\min}))}{P_{\min}}$$

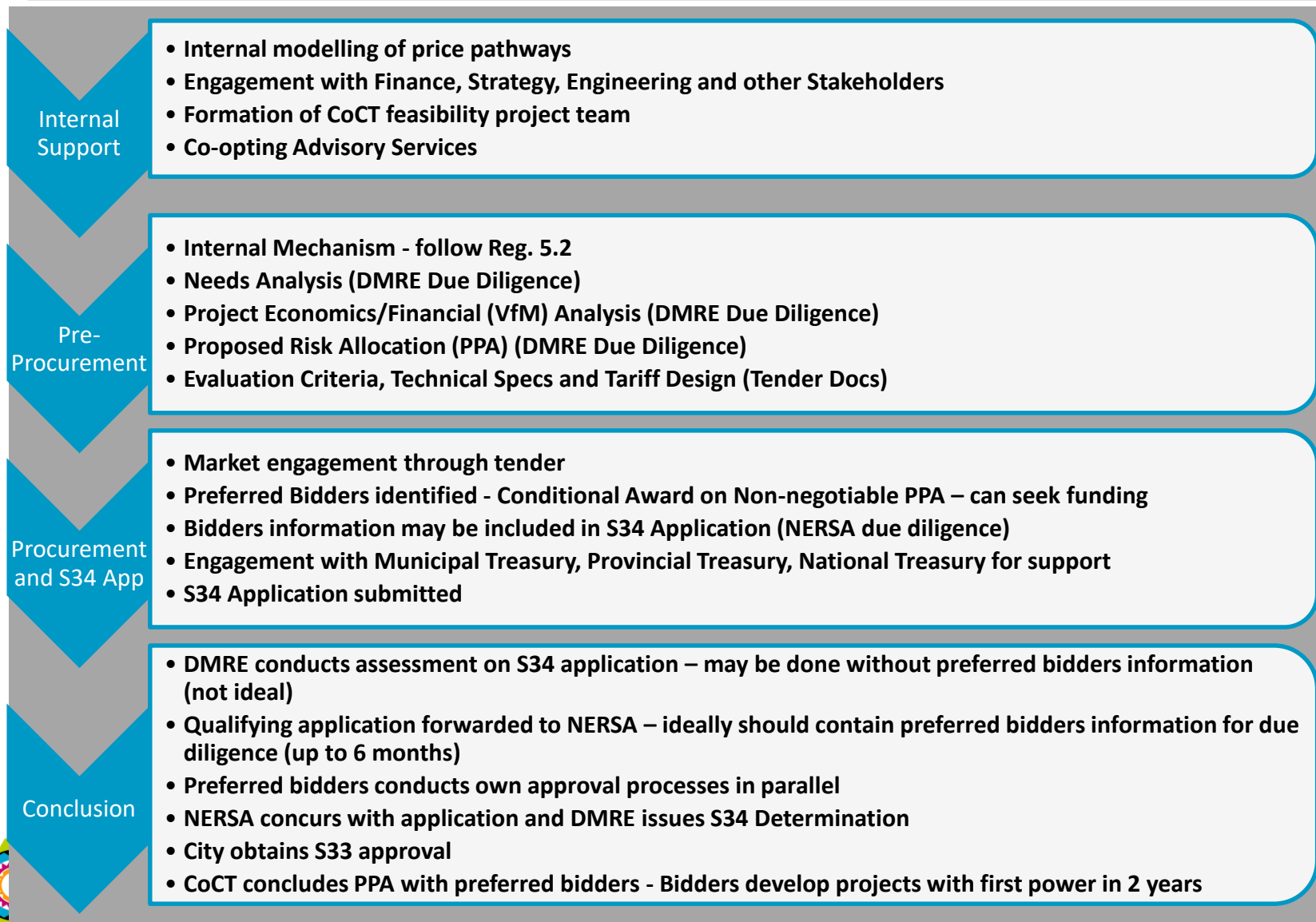
Where: P_s is the number of points scored for price;
 P_t is the price of the tender under consideration
 P_{\min} is the lowest price among the responsive tenders received

$$N_T = P_s + N_p$$

Where: P_s is the number of points scored for price;
 N_p is the number of points scored for preference.

Highest scoring bids preferred first until 200MW reached

Typical Process Flow



Key Lessons for Municipalities

- Internal Municipal processes are not geared towards private energy procurement – extremely risk averse environment with multiple checks and balances
- Ability of municipalities to speedily adapt internal processes to support energy procurement is key to success of program
- Bid specifications process a highly complex exercise involving multiple stakeholders
- Developing PPA with “right” risk allocation (attractive to lenders and protecting interest of the City) a difficult balancing act. Early engagement with lenders may be effective risk mitigation lever
- Need for dedicated, experienced legal and TA services a given. Munics should not go it alone.
- Municipalities do not have sovereign backing like REIPPPP. Suitable credit support mechanism and its funding may be bridge too far for most munics. City opted to include escrow account as credit support.
- Open question whether most municipalities can afford to cover termination payments due to buyer default – doubtful that lenders will accept this risk.
- Internal capacity to sustain IPP Procurement program is critical, increasing overall cost of the program. Overall cost and resources impact of procurement program much wider.
- Risk incurred by City officials due to novelty of program is significant and consequences can be severe if anything found amiss in terms of processes followed

Novel exercise for City – Next bidding round will be easier!





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Thank You

Making progress possible. Together.