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# **Comments on Progress with regard to Solar Water Heater Rollout**

**Select Committee on Economic Development**

**28 February 2012**



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# Outline

1. General comments on rollout
2. Eskom Subsidy Programme
3. Rollout to RDP houses
4. Models for rollout
5. Replacement of geysers
6. Barriers to implementation
7. Conclusions



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# General comments on rollout

- Typically, geyser consumes 40 to 60% of total household electricity consumed in mid to high income house
- Large scale roll-out would significantly **reduce electricity consumption**
- In a mid-high income household, water heating **costs can be reduced by 25-40%**
- **Health (and savings) benefits** for low income households



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# ESKOM Subsidy Programme

- Target high income households
- Consumer has to have the upfront capital (R12 000 – R25 000)
- Subsidy is claimed via the supplier/installer or by the household
- Many consumers can't finance the capital cost which is still high
- Two months to be paid subsidy – can be challenging



# Rollout to RDP houses

- Low pressure systems – no electricity back-up, much cheaper
- These households not using electric geysers to begin with (heating water in kettles or on stoves – paraffin or electric)
- Studies show that electricity consumption does decrease
- Water consumption increases (but should NOT be seen as an obstacle)

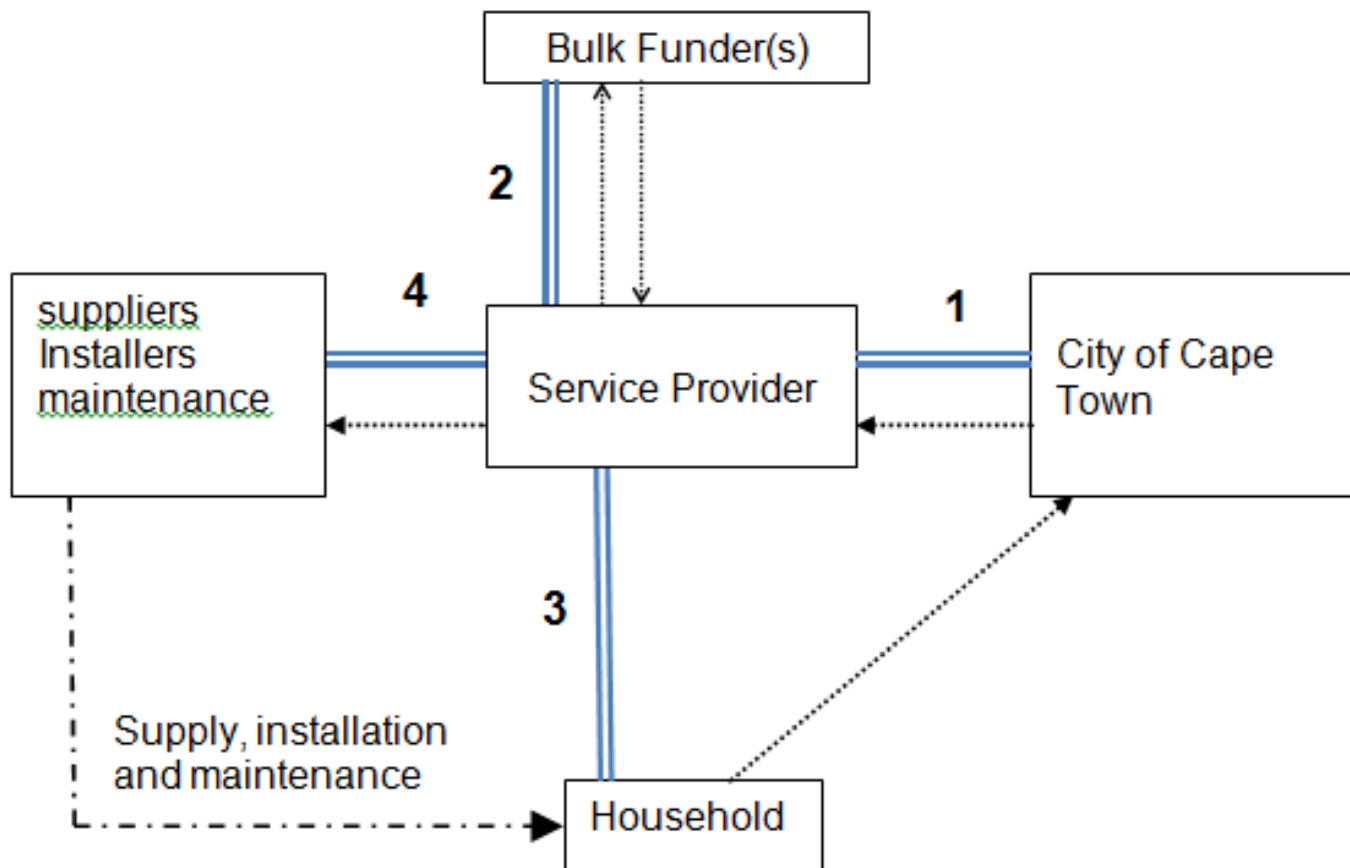




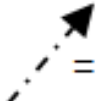
# Models for Rollout

- Proposal by City of Cape Town: mid to high income
  - City contract service provider/s who subcontract suppliers/installers;
  - No up front cost to household
  - Fund established to provide the upfront financing and bridging for rebate
  - Repayment via the City's billing system
  - Jobs, industry development, competitive pricing
  - 10% reduction in electricity demand by the city!
  - R8bn savings to households over 10 years (today's rands)
  - R1bn reduction in annual electricity income to the City!!

# Solar water heater roll out :

## 300 000 to mid to high income (low income scheme dependent on Eskom funding)



Key  = Contract  = Payment / funds-flow  = supply and service SWH

## SOLAR WATER HEATERS: JOBS

A solar water heater mass rollout programme to reach 50% of the City's houses (approx 0.5 million systems) would create **10,200 job-years** over the next 10 years and be economically beneficial to the citizens and the economy.



**Low income roll out** is dependent on Eskom subsidy allocation – need to be free to households, awaiting revised subsidy amount





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# Replacement of Geysers

- Could be driven by insurance industry: needs to be legislated
- When geyser bursts – consumer given option of efficient water heating device
- Current time lag due to lack of installers due to slow roll-out. (also high cost!)  
Additional cost could be taken up in form of soft loans to consumer



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# Barriers to implementation

- High upfront cost – high margin industry in high pressure market
- Limited number of trained plumbers and installers – due to low demand
- Poor marketing to consumers; consumers nervous of making the right choice
- Hassle of replacing something that is working
- Limited involvement by banks and insurance industry – could make loans available at attractive interest rate
- Energy efficiency has an impact on municipal income !!



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## National Building Regs Amendment

- National Building Regs Amendment promulgated Nov 2011\_Energy Efficiency Standard, SANS10400XA:
- = 50% of hot water to be sourced via energy efficient sources in all new build.