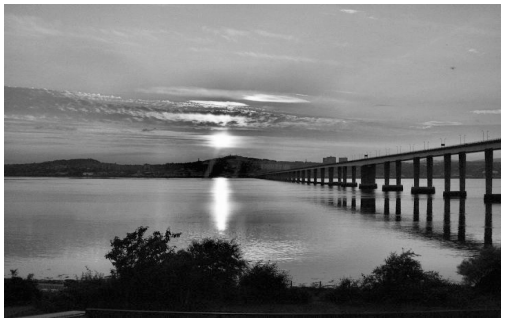

Capturing Hearts & Minds:
Citizens & Sustainability

Lessons from Dundee Sun City.

Elaine Morrison, MA (Hons), PGCE, MSc
Chair - Solar Cities Scotland

Solar Cities Scotland

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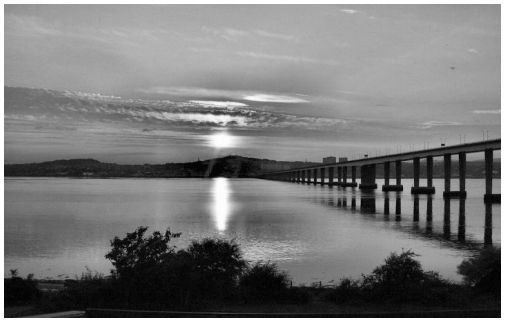
The Solar Imperative

- Fossil fuel depletion & Peak Oil
- Climate change
- We are all part of the problem
- And part of the solution.
- Scotland very well placed to lead by example – and especially Dundee…



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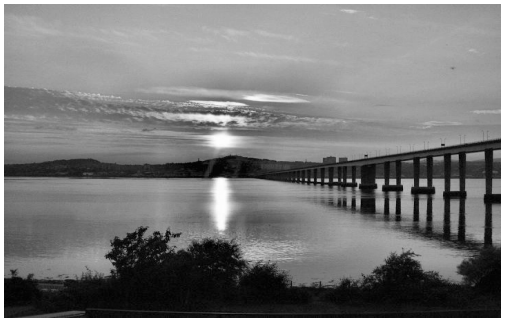
Why Cities?

→Cities account for **75%** of global energy demand.



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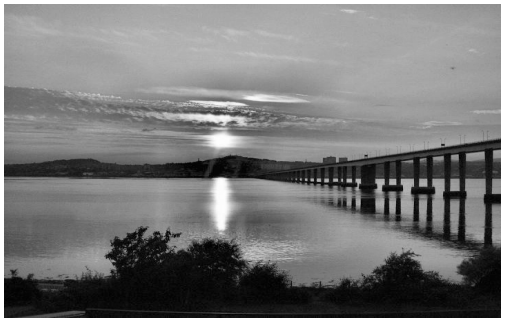
Solar Cities

- We define a Solar City as:

- ‘An urban community which aims to develop a strategic approach to maximise use of renewable energy technologies wherever feasible, in conjunction with improvements to the thermal performance of its building stock, with the aim of achieving carbon emission reductions from the built environment at least in line with relevant local and national targets’ (Morrison, 2005).



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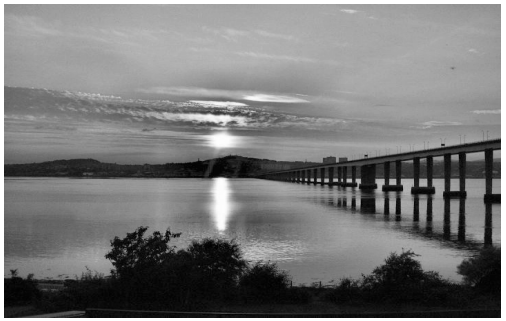
Solar Cities Scotland

- In order to help urban communities throughout Scotland achieve this goal, Solar Cities Scotland has been established.
- Solar Cities Scotland is a membership organisation based in Dundee, and has the following objectives:

  - [1] To advance the education of the public concerning renewable energy and energy efficiency through a programme of training, publishing, demonstration projects, seminars and any other means for providing public knowledge and information.

    [2] To encourage and participate in research and development in renewable energy for the public benefit.

    [3] To conserve and protect the physical and natural environment through the promotion of sustainable energy practices.



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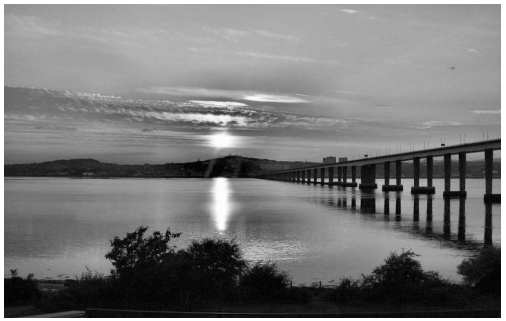
Key Activities

- ‘Sun City’ conferences
  - Network & collaboration building
  - November 2008 – the 4th Sun City conference – Becoming a low carbon community
- Dundee Sun City.



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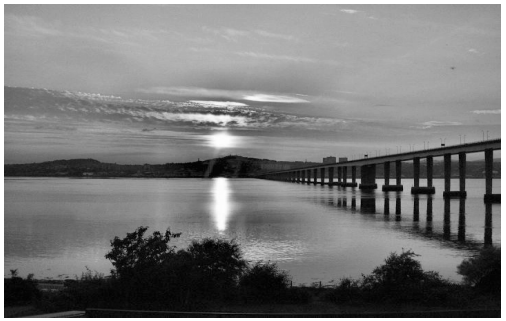
Dundee – a Solar City.



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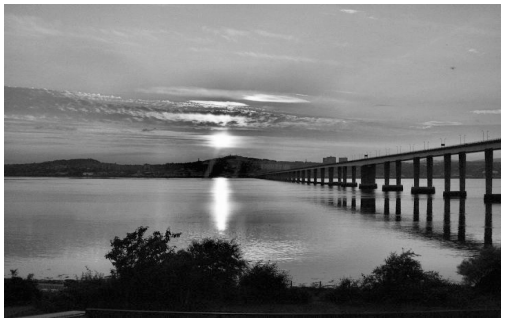
Why Dundee?

- Excellent solar resource
- City situated on north shore of Tay estuary
- Committed public, educational, and private organisations
- City in need of an economic and image overhaul…



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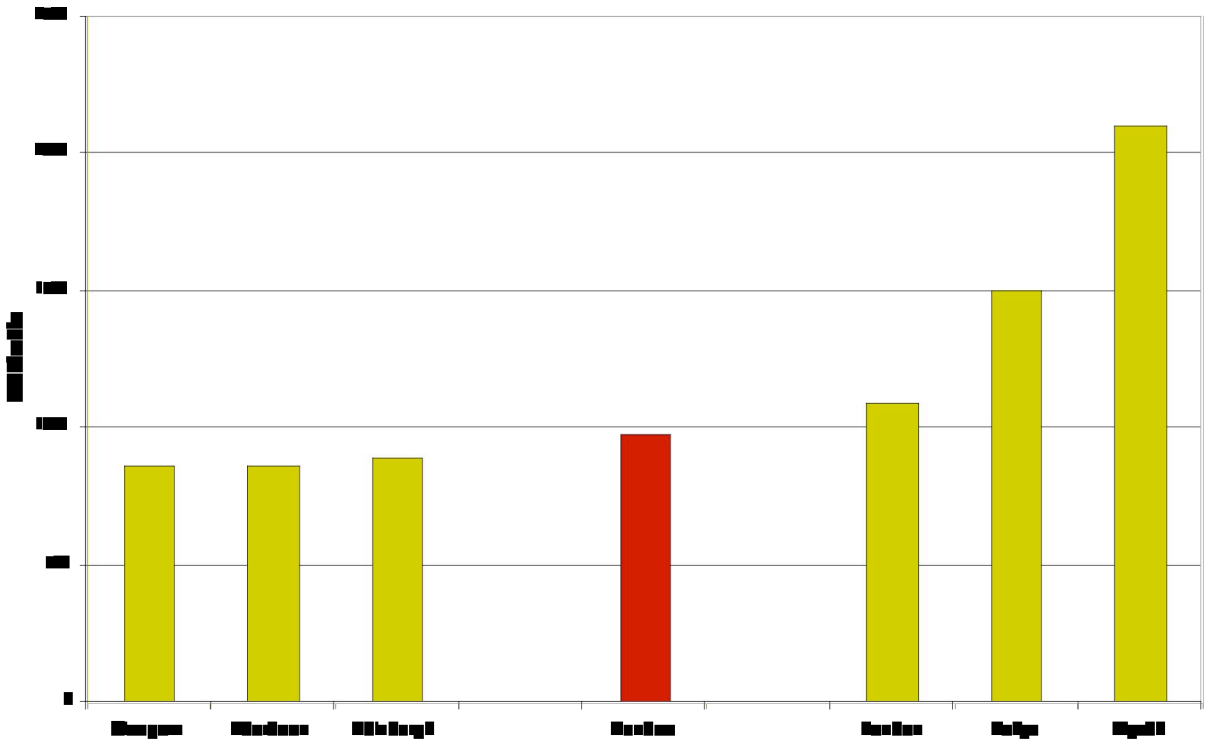
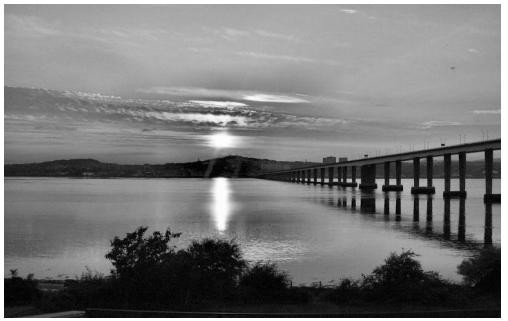
Solar Energy in Dundee
How it compares





© Elaine Morrison, 2005

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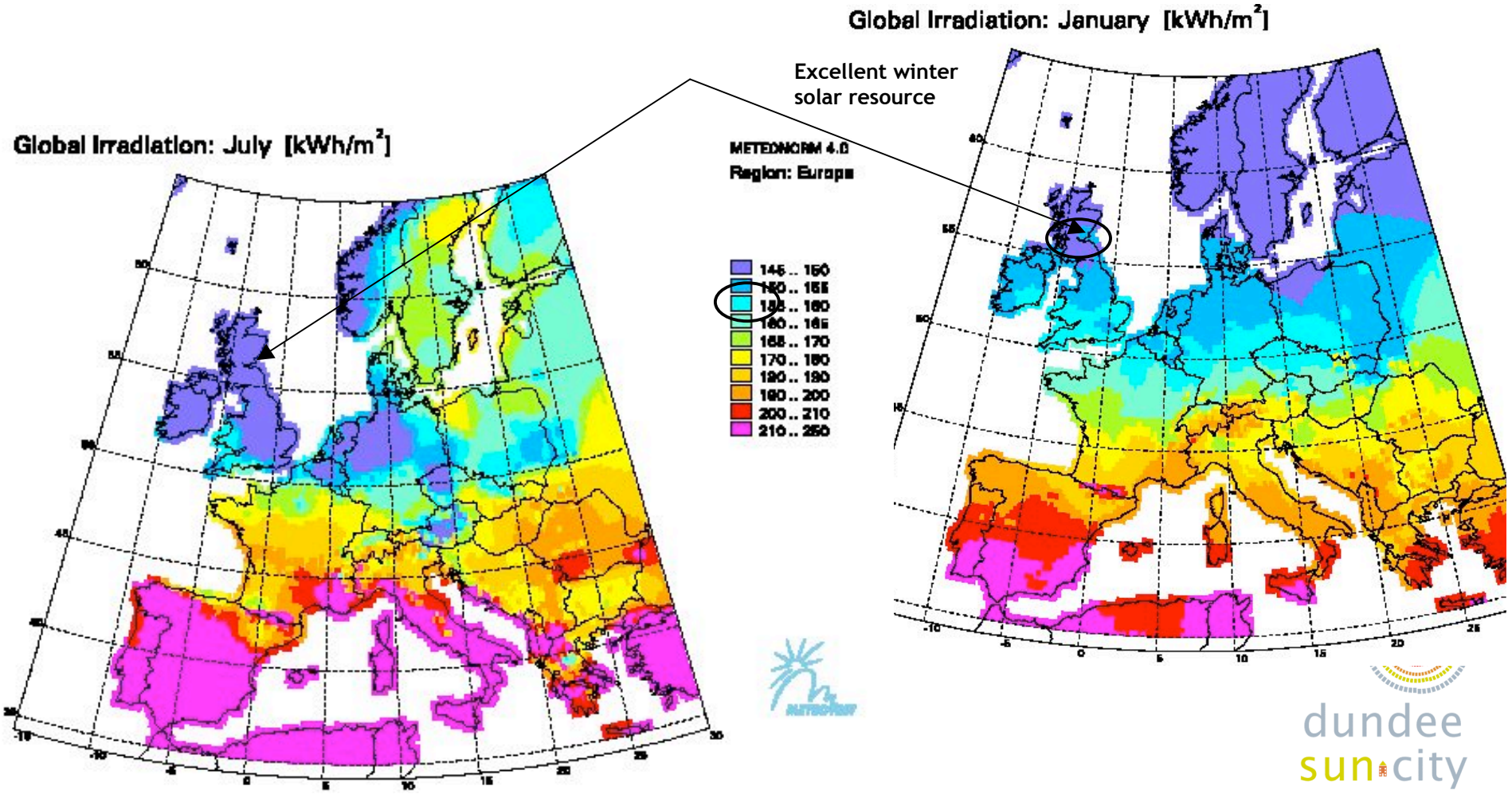
Renewable Energy in Dundee
Solar Resource



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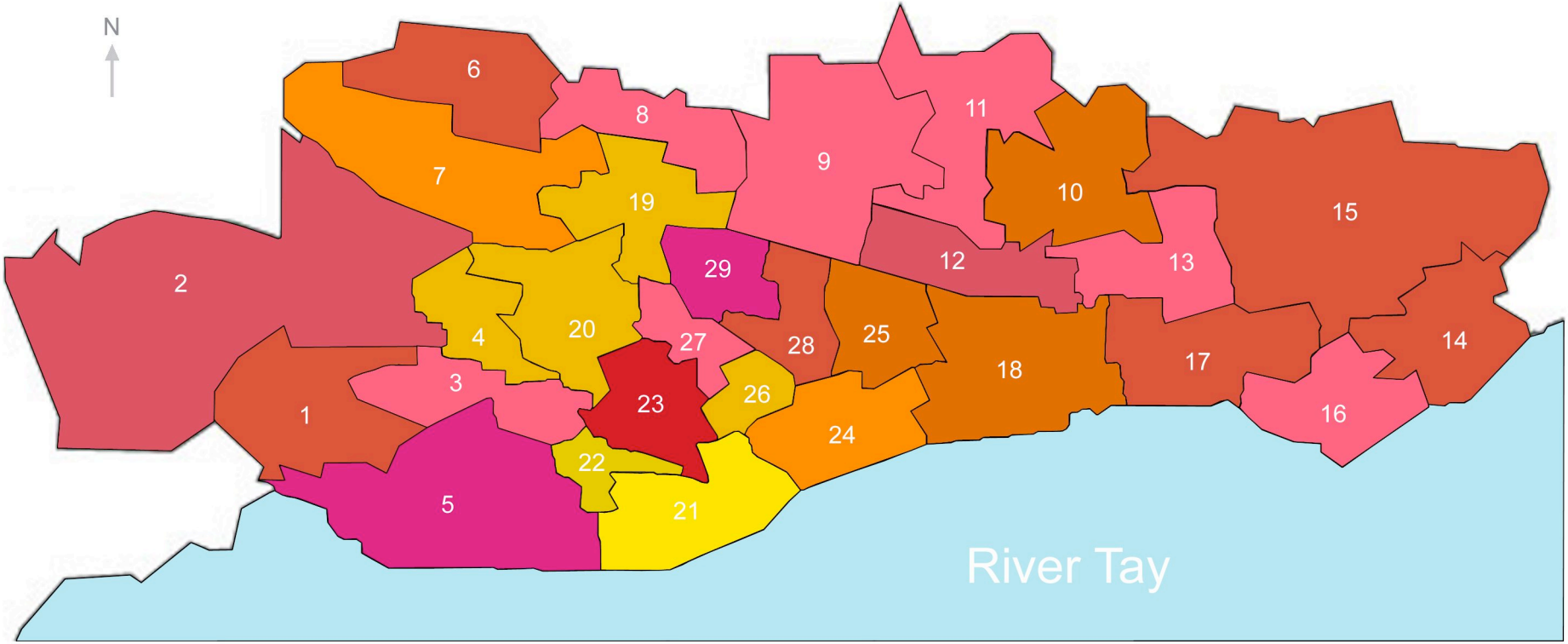
Renewable Energy in Dundee
Solar Potential



Scale: map not to scale

Colour Key

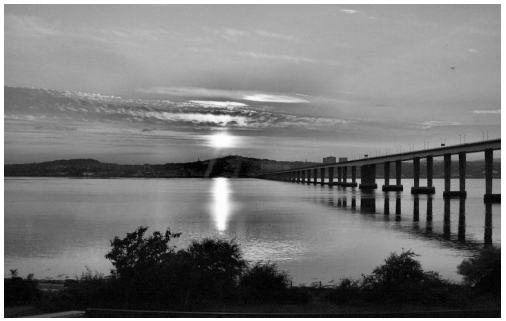
30%	60%
40%	65%
45%	70%
50%	75%
55%	80%

Percentage of Domestic Properties in Dundee Electoral Wards Oriented Between South West and South East.

© Morrison, 2005

Dundee Sun City
The Vision

- To establish Dundee as Scotland's first Solar City.
- To encourage citizens and organisations to adopt a responsible attitude towards energy.
- To bring economic benefit to Dundee from renewable energy investments.



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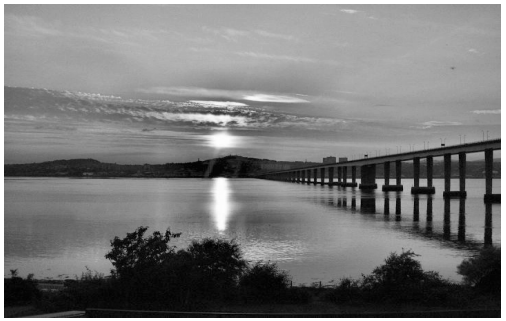
Partners

- Solar Cities Scotland
- Dundee City Council
- Dundee College
- Dundee Partnership for the Environment
- Hillcrest & Servite Housing Associations
- Private sector
- SCARF
- Scottish Enterprise Tayside
- University of Abertay Dundee
- University of Dundee…



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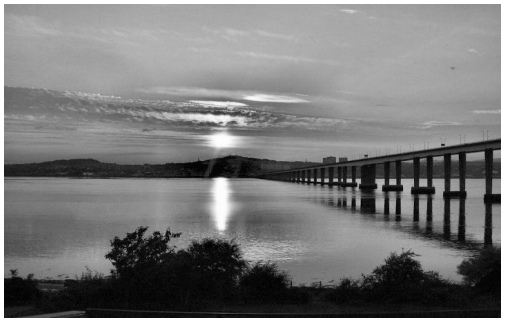
Dundee Sun City
Actions

- To encourage citizens and organisations to adopt a responsible attitude towards energy:

- Education & awareness raising
  - Formal education programmes
  - Dundee Sun City Campaign
  - The Sun City House…



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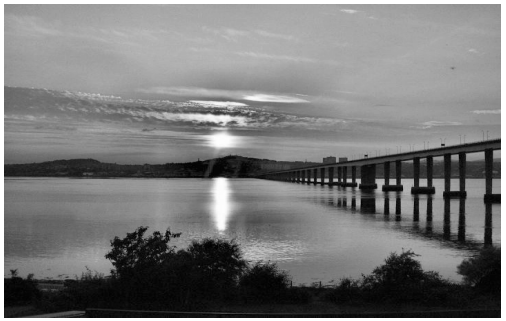
Sun City House

Sustainable energy advice & information centre for all. Opens April 2008.

Dundee Sun City Actions

- To bring economic benefit to Dundee from renewable energy investments:
  - Upskilling & training local workforce
  - Encouraging inward investment in the manufacturing sector
  - Developing a research centre of excellence – collaboration.



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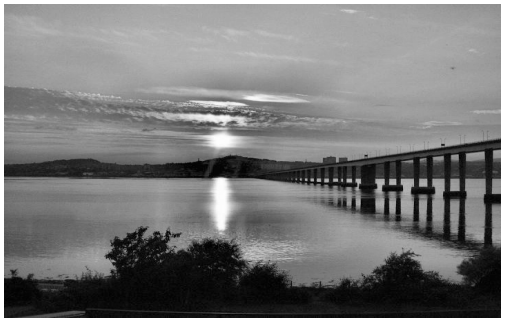
Winning Hearts & Minds

- April 2007 launch of public engagement campaign.
- Full time campaign officer.
- www.dundeesuncity.org.uk - carbon footprinting, renewables benchmarking & information.
- Events and media activity.
- One year on…



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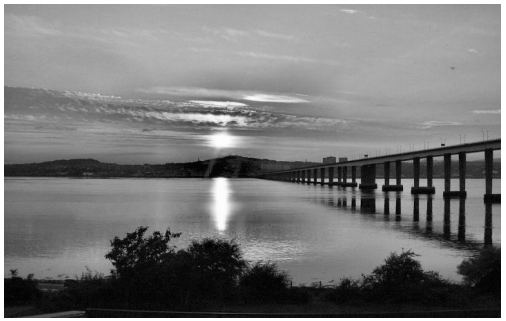
The Challenge

- c68,000 households in Dundee
- <1000 carbon footprints calculated.
- Recognition levels low…
- But people do know that Dundee is Scotland's sunniest city,
- And they love the Michelin turbines!



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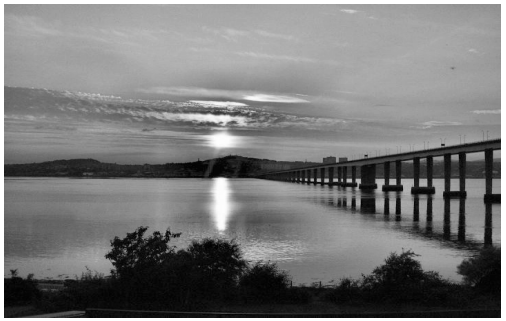
Reflections

- These things take time!
- The Sun City House will be a key asset
- Solar Citizen groups will allow more in depth community engagement –
- But it won't be enough to engender real change.



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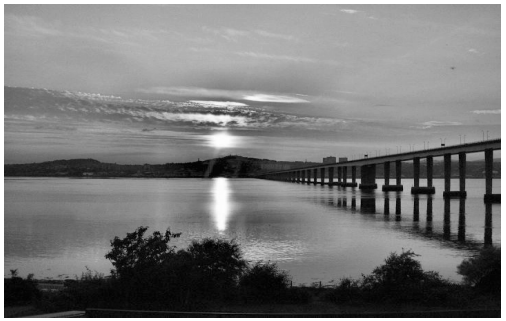
The Way Forward

- Dundee Sun City has been organisational led.
- Without real teeth it cannot impact upon lifestyles and behaviour to the extent necessary to have punch.
- And crucially – the demand for change MUST come from the community itself.



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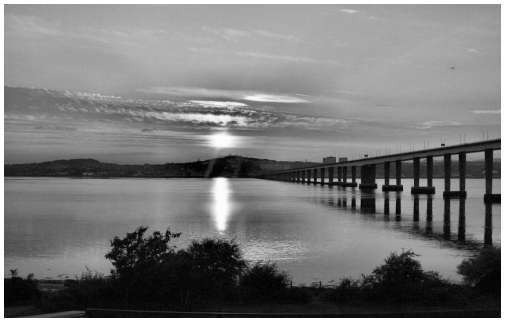
Collaborate or Die

- Dundee Sun City is a bridge between the establishment and the people.
- It can articulate a shared vision of a post-hydrocarbon society.
- It can facilitate co-operation and collaboration.
- It can prove a genuine vehicle for change.



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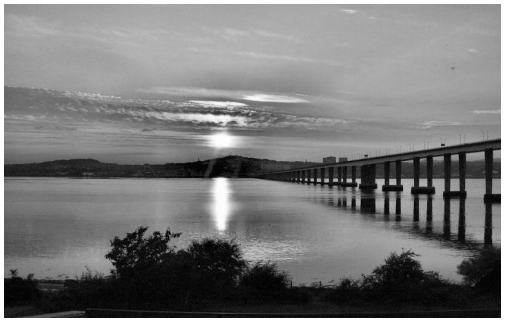
Solar Cities
Realising the vision

- Ethos of shared responsibility and collective action, and
- A clearly laid out, bold and meaningful strategic framework for implementation.
- The true and immediate value of the‘solar city (etc) lies in adopting it as a mindset - a shared vision for civic society & action to tackle resource depletion and climate change.



Solar Cities Scotland

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Be realistic – demand the impossible!
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