Ministerial Response to Advice from the Premier’s Climate Change Council

HOUSE OF ASSEMBLY
LAID ON THE TABLE

05 September 2012
Ministerial response to Premier’s Climate Change Council’s Advice regarding Environmental Upgrade Finance for Greening South Australia’s Building Stock

Background

The Premier’s Climate Change Council (the ‘Council’) is established under the Climate Change and Greenhouse Gas Emissions Act 2007 (‘the Act’) to provide independent advice to the Minister for Sustainability, Environment and Conservation (‘the Minister’) about matters associated with reducing greenhouse gas emissions and adapting to climate change.

The Act stipulates that any advice received from the Council must be tabled in Parliament, along with a Ministerial statement which sets out the extent to which advice has been acted on and, to the extent that it is not accepted, the reasons why not (sections 11(4) (b) and (c) of the Act).

This statement outlines the Minister’s response to advice endorsed by the Council on 30 April 2012 regarding Environmental Upgrade Finance for Greening South Australia’s Building Stock, which makes a series of recommendations regarding the establishment of an innovative green building finance mechanism in South Australia known as Environmental Upgrade Finance.

Overview

The South Australian Government welcomes the Council’s advice regarding the establishment of an Environmental Upgrade Finance (EUF) mechanism in South Australia and acknowledges the initial investigations and stakeholder engagement undertaken by the Council in the development of its advice.

As noted in the Council’s advice, over a fifth of South Australia’s greenhouse gas emissions result from the buildings sector. Having implemented a number of strategies to reduce the carbon footprint of the State’s built environment, the South Australian Government recognises that further action is required to improve the environmental performance of existing buildings and address the challenges associated with this task.

International examples suggest that property-related financing mechanisms such as EUF could potentially assist in addressing a number of barriers to investing in environmental upgrades of buildings, including access to lower-cost finance and the ‘landlord-tenant split incentive’.

In Australia, New South Wales and Victoria have recently established EUF schemes primarily targeting commercial buildings, and the Council has highlighted the opportunity to establish a similar mechanism in South Australia.

To inform this response to the Council’s advice, the South Australian Government has completed the following:

- an investigation into the location and potential scale of the commercial building retrofitting opportunity in South Australia;
- consultation with key stakeholders from the local government, property and finance sectors;
- consultation with parties involved in the design and delivery of EUF schemes in New South Wales and Victoria.

In line with the Council’s primary recommendation, the Government focussed its initial efforts on investigating the potential in the commercial buildings sector. The outcomes of the investigations are summarised below.

The Commercial Building Retrofitting Opportunity

The South Australian Government, in collaboration with the Adelaide City Council, commissioned a report to investigate the location and potential scale of the commercial building retrofitting opportunity in South Australia. The South Australian Division of the Property Council of Australia assisted with the provision of underpinning data.

The first part of the study analysed the number of commercial (non-residential) buildings in all South Australian local government areas in order to identify
Ministerial response to Premier’s Climate Change Council’s Advice regarding Environmental Upgrade Finance for Greening South Australia’s Building Stock

which local government areas Environmental Upgrade Finance is most relevant to. It confirmed the City of Adelaide as the South Australian municipality with the greatest number of commercial properties, with over 3000 properties consisting predominantly of commercial shops and office accommodation. It also identified the following municipalities as home to between 1000 and 2500 commercial properties each (in descending order):

- Port Adelaide Enfield - predominantly commercial retail, industrial and warehouse;
- Charles Sturt - predominantly commercial retail and warehouse;
- Onkaparinga - predominantly commercial retail, industrial and warehouse;
- Salisbury - predominantly warehouse;
- West Torrens - predominantly commercial retail;
- Norwood, Payneham and St Peters - predominantly commercial retail and office accommodation;
- Unley - predominantly commercial retail and office accommodation.

The report concluded that the varying types of properties across various municipalities has implications for policy design and further engagement with stakeholders.

The second part of the study analysed the scale of the retrofitting opportunity within office buildings in the Adelaide CBD and fringe only, and excluded other types of commercial buildings and other regions. This was assessed in terms of capital investment, employment opportunities, carbon abatement potential, and economic development opportunities for the South Australian manufacturing sector.

The study concluded that the retrofitting potential of commercial office buildings in the CBD and fringe alone could unlock between $78 million and $666 million of capital investment in environmental upgrades, account for between 310 and 2685 direct jobs, and achieve between 6% and 32% ‘greenhouse gas savings’.

The study also estimated the associated potential demand for retrofitting products, including building fabric, electrical, lighting, heating ventilation and air conditioning, and renewable energy products, and consequently identified significant potential opportunities for South Australian manufacturers.

Stakeholder Consultation

The South Australian Government also issued a consultation paper seeking views of stakeholders regarding the establishment of a EUF mechanism in South Australia. The consultation period closed on 20 July 2012 and 13 submissions were received from organisations from the local government, property, and finance sectors.

A number of local government organisations provided comments expressing support for the intent of the scheme and for further investigations into EUF in South Australia. Views from these organisations gave a useful insight into the potential implications of a EUF mechanism on local government operations, including cost and resource impacts, and raised a number of issues for the South Australian Government’s consideration. Local governments are of the view that a EUF scheme should not increase costs for participating Councils. Some Councils also expressed the view that the South Australian Government may be better positioned to administer such a scheme, should a decision be made to implement a EUF mechanism in South Australia.

Views were also received from financiers involved in the development and implementation of existing EUF.

---

1 Greenhouse gas savings represent the proportion of estimated greenhouse gas emissions arising from energy consumption in office buildings in the Adelaide CBD and fringe based on total floor area and an assumed average greenhouse performance per square meter equating to a NABERS Energy Rating (base building) of 2.5 Stars.
Ministerial response to Premier’s Climate Change Council’s Advice regarding Environmental Upgrade Finance for Greening South Australia’s Building Stock

schemes in New South Wales and Victoria. These organisations provided comments on various aspects of interstate models and their implications for the scheme’s efficiency if similar models were to apply in South Australia. The submissions also raised a number of issues for consideration by the South Australian Government which could affect the efficient delivery of a EUF scheme. For instance, financiers emphasised the importance of a uniform approach to the scheme’s design and its availability across the State, and encouraged the South Australian Government to work with local government to establish an efficient and effective EUF mechanism in South Australia.

Submissions were also received from a number of peak property industry bodies. These organisations expressed their support for the introduction of a EUF scheme and encouraged the South Australian Government to work with local government to establish a EUF mechanism in South Australia. These submissions also provided comments in relation to a preferable administrative model for our State.

Engagement with Interstate Administrators

The South Australian Government has also engaged with parties involved in the design and delivery of EUF schemes in Victoria and New South Wales to gain a better understanding of their progress and outcomes to date, legislative models, delivery and funding models and key lessons learnt. The South Australian Government would like to thank these organisations for the provision of information, collaboration and cooperation which assisted in the development of this response.

Conclusion and Next Steps

The results of the preliminary investigations undertaken by the South Australian Government since receiving the Council’s advice have identified that whilst Environmental Upgrade Finance schemes established in Victoria and NSW are relatively immature and their success is yet to be fully realised, significant potential economic and environmental benefits could be derived from establishing environmental upgrade finance in South Australia.

Stakeholder consultation indicated strong support from property and finance sector stakeholders, and in-principle support from the local government sector for the intent of the mechanism, as well as support for more detailed investigations and consultation.

Consultation with key stakeholders has also re-enforced that a mechanism such as EUF would impact a wide range of stakeholders, including local governments, the finance sector and the property sector, in particular building owners and tenants; therefore any decisions to implement a EUF mechanism should be well-considered and the subject of further consultation.

Therefore, and in keeping with the Council’s primary recommendation, the South Australian Government will build on these results and continue to work with key stakeholders from the local government, property and finance sectors, as well as tenancy advocacy groups, to develop the business model and business case for establishing Environmental Upgrade Finance for commercial buildings in South Australia.

In particular, the South Australian Government will:

- continue to monitor the implementation of the EUF schemes in Victoria and New South Wales;
- continue to work with key stakeholders to further investigate potential delivery models and their associated establishment and operating costs;
- identify and explore different approaches to managing the tension between tenant protection and minimising red-tape for building owners.

The Department of Environment, Water and Natural Resources will continue to lead this work on behalf of the South Australian Government and report back to me regarding progress.
MINUTES forming ENCLOSURE to

Subject: Environmental Upgrade Finance for Greening South Australia’s Building Stock

1. Purpose

To provide advice regarding Environmental Upgrade Finance for Greening South Australia’s Building Stock, pursuant to section 11(3)(a) of the Climate Change and Greenhouse Emissions Reduction Act 2007 as resolved by the Premier’s Climate Change Council (“the Council”) on 30 April 2012.

2. Background

The Council has recently undertaken investigations into what else can be done to ensure that South Australia’s built-environment is low carbon, resource efficient and resilient to the long-term impacts of climate change. It has consulted with developers, builders, industry associations, local government and other key stakeholders and examined best practice examples from interstate and overseas. Through these investigations, the Council has identified an innovative green building finance mechanism known as Environmental Upgrade Finance that it believes is worth pursuing. The adoption of this mechanism creates an opportunity for South Australia to facilitate low cost carbon abatement in the buildings sector while protecting building owners and tenants from increasing energy costs, stimulating investment and growing the building upgrade industry.

The Council has investigated Environmental Upgrade Finance, and outlines its findings both below and in the attached discussion paper (Attachment 1). This extends to how the mechanism operates and potential benefits for South Australia. The investigations have informed the Council’s recommendations for the establishment of Environmental Upgrade Finance in South Australia.

3. Discussion

Environmental Upgrade Finance allows a loan to be tied to a property, rather than a property owner, to finance a building upgrade project that results in reduced energy and water costs. It also allows loan repayments to be collected via a statutory charge that is levied on the property by the Local Council and passed on to the financier. In the event of a transfer in ownership of the property, the loan remains with the property, and the obligation to make the repayments transfers to the new owner, along with the benefit of reduced utility costs.

The mechanism has a number of benefits to finance, property and public sector participants.
- Financiers benefit from a lower level of risk due to the security provided by the charge being levied against the property and through being elevated to Local Government’s creditor status, which allows them to offer finance at a lower rate. The mechanism also offers a new pipeline of investment opportunity.
• Property owners benefit through being able to access capital at lower cost and by increasing the performance of their building, its attractiveness to tenants and the overall value of their asset. Being a council charge, the building owner is also able to pass some or all of the additional cost of the charge through to tenants as part of the lease arrangement.
• Tenants benefit from lower outgoings providing the additional cost of the charge is lower than the value of the energy and water savings derived as a result of the upgrade.
• The mechanism is attractive to Local and State Governments as it simultaneously contributes towards carbon and other environmental targets and goals, stimulates economic investment, reduces energy costs for business, and enhances competitiveness with other cities and regions without requiring large amounts of funding to implement.

The mechanism overcomes a number of key barriers to implementing energy and water efficiency upgrades for buildings, including:
• Lack of available capital for environmental upgrades from traditional financiers because of a lack of security as collateral for a loan
• Building owners' perception that the investment won't yield a sufficient return in savings
• The split incentive in leased buildings where the building owner is not incentivised to invest in energy and water efficiency as the tenant pays the utility bills. Under environmental upgrade finance, tenants can share in both the costs and the benefits.

Underpinned by changes to local government legislation, environmental upgrade finance mechanisms have been established in both Victoria and New South Wales primarily for commercial (non-residential) buildings. The legislation gives Councils the power to levy the charge against the property. In practice this is enacted through a tripartite agreement between property owner, financier and Council known as an Environmental Upgrade Agreement.

Key design features for environmental upgrade agreements are that:
• The total expected financial savings resulting from the upgrade should be greater than or equal to the repayment cost of the loan. This ensures that funds are only put towards projects that are economically viable within the term of the loan (typically 10 years).
• The length of the loan should not exceed the useful life of the upgrade measures.
• Upgrade measures should be fixed (or “nailed-down”) to the property.
• Upgrade measures should be ‘bundled’, enabling measures with longer payback periods to be packaged or blended with measures with shorter payback periods, thereby maximising the total cost saving and environmental benefits whilst deriving a commercially acceptable return.
• The existing mortgage holder of the property should receive notice of the pending new property charge prior to building owner entering into a finance agreement.

Whilst the mechanism applies to all categories of commercial buildings – including office, hotel, retail, education, healthcare, public and industrial – as well as strata-titled apartment buildings of more than 20 lots (NSW only) – it could also theoretically be applied to homes and other residential buildings, district-level infrastructure such as district heating and cooling networks, and possibly also new buildings.

Environmental Upgrade Finance offers a range of benefits.
• A report commissioned by the City of Melbourne in 2009 estimated that environmental upgrades of office buildings alone under the City of Melbourne’s 1200 Buildings Program could drive between $0.8 and $1.7 billion in additional investment
in retrofitting construction expenditure. The report also estimated that on average around 800 full time jobs would be directly created each year in the building industry and its supply chain over 11 years.

- The equivalent scenario applied to Adelaide, at around one quarter the size of Melbourne, could unlock $200m in building sector investment if a similar potential exists to cost-effectively improve the environmental performance of the building stock. Where upgrades involve locally provided equipment, the investment will support South Australian manufacturing.
- Environmental Upgrade Finance is designed to capture low-cost greenhouse gas abatement, thereby contributing to South Australia’s greenhouse reduction effort.
- Improved water efficiency, thereby contributing to the aim of South Australia’s water security plan, Water for Good, to ensure that South Australia’s water supplies are secure, safe, diverse, reliable and able to sustain a growing population and a growing economy in a changing climate.
- Reduced energy and water costs for building owners and/or lessees.
- Improved indoor environment quality and comfort for building occupants, and potential productivity improvements.

The benefits of an environmental upgrade finance mechanism and the value of the mechanism to state and local governments needs to be quantified more accurately and compared with the cost of administrative and governance arrangements to manage the finance.

Based on its investigations so far, Council suggests that the following steps would be required to establish the mechanism in South Australia.

1. Engage with local government, in particular Adelaide City Council, to
   a. agree underpinning design principles
   b. develop the business case for Environmental Upgrade Finance in South Australia, including quantification of the likely investment and abatement potential in building upgrades.
2. Enact legislative change
3. Establish governance and administrative arrangements

4. Recommendations

In order to realise the economic, environmental and social benefits associated with improved energy and water efficiency in the property sector, it is recommended that the South Australian Government:

1. Work with the local government sector to develop the business model and the business case for Environmental Upgrade Finance for commercial buildings in South Australia that:
   - is aimed at delivering low cost carbon abatement and improving the resource efficiency and climate resilience of buildings;
   - maximises the long term economic and environmental benefits through broad coverage – both geographically and in the types of buildings to which it can be applied;
   - is administratively efficient;
   - is consistent with existing mechanisms in other Australian jurisdictions so as to minimise the administrative burden on finance and property institutions that operate nationally; and
   - provides adequate protection for consumers and stakeholders.

---

1 Deloitte, June 2009, City of Melbourne – 1200 Buildings – analysis of potential economic benefits
2. Subject to the above, investigate amending relevant legislation in order to provide councils with the necessary powers to raise an environmental upgrade charge against a property, as well as to establish associated provisions regarding consumer protection, the liability of councils and loan transfer and discharge processes.

3. As an initial priority, work with the Adelaide City Council to develop arrangements for administering Environmental Upgrade Finance within the City of Adelaide municipal area, before expanding to other local government areas.

4. Following the establishment of Environmental Upgrade Finance, investigate the potential to expand the mechanism to apply to the environmental upgrade of residential buildings, to the installation of neighbourhood infrastructure such as district heating and cooling networks, and also to new buildings.

Bruce Carter  
Chair  
Premier’s Climate Change Council  
9/05/2012

Attachments:  
1) Discussion Paper: Greening our Building Stock - Establishing Environmental Upgrade Finance in South Australia
Discussion Paper: Greening our Building Stock - Establishing Environmental Upgrade Finance in South Australia

1. Background

Over a fifth of South Australia’s greenhouse gas emissions result from energy demand in the building sector. The South Australian Government has put a series of strategies and measures in place to tackle emissions from this sector. This includes: encouraging a more compact and carbon efficient city through the 30 Year Plan for Greater Adelaide; phasing out the installation of inefficient water heaters and the sale of inefficient air-conditioners; encouraging the uptake of household solar panels; demanding better performing buildings through Government’s office-leasing policy, developments such as Lochiel Park; and encouraging low carbon innovations through the Building Innovation Fund.

The Council has recently undertaken investigations into what else can be done to ensure that South Australia’s built-environment is “Climate Smart” - meaning that it is low carbon, resource efficient and resilient to the long-term impacts of climate change. It has consulted with developers, builders, industry associations, local government and other key stakeholders and examined best practice examples from interstate and overseas.

Through these investigations, the Council has identified an opportunity for South Australia to simultaneously facilitate low cost carbon abatement in the buildings sector, protect building owners and tenants from increasing energy costs, stimulate investment and grow the building upgrade industry through the establishment of an innovative green building finance mechanism known as Environmental Upgrade Finance.

The Council has explored Environmental Upgrade Finance, along with the potential benefits that they offer to South Australia and the key steps that would need to be taken in order to establish them in South Australia. As part of its investigations, Council has consulted with representatives from the property, finance and local government sectors and has been briefed by Scott Bocskay of the Sustainable Melbourne Fund which has established environmental upgrade finance in Victoria. This discussion paper outlines the outcomes of its investigations, which have led to the Council’s recommendations in relation to establishing Environmental Upgrade Finance in South Australia.

2. Discussion

An Overview of Green Building Finance Mechanisms

Green building finance mechanisms allow a loan to be tied to a property, rather than a property owner, to finance a building upgrade project that results in environmental benefits such as reduced greenhouse gas emissions, improved energy use and reduced water consumption. This mechanism allows loan repayments to be made through a property related charge such as council rates, property tax or an energy bill. Upgrade projects may include bundles of measures such as the installation of insulation, shading devices, energy efficient lights and fixed appliances, water efficient taps and plumbing fixtures and on-site energy generation such as solar photovoltaic and co-generation. These projects are designed so as to result in lower energy, water and maintenance costs. In the event of a transfer in ownership of the property, the loan remains with the
property, and the obligation to make the repayments transfers to the new owner, along with the benefit of reduced utility costs. Capital is usually provided through the banking and finance sector at a lower interest rate due to the reduced level of risk to the financier. The role of state and/or local governments usually centers on enacting the enabling legislation and providing ongoing coordination or administration.

Such mechanisms overcome a number of key barriers to implementing environmental upgrade projects of buildings, including:

- Lack of available capital for environmental upgrades from traditional financiers because of a lack of security as collateral for a loan
- Building owners’ perception that the investment won’t yield a sufficient return in savings
- The split incentive in leased buildings where the building owner is not incentivised to invest in energy and water efficiency as the tenant pays the utility bills. Under green building finance mechanisms, tenants can share in both the costs and the benefits.

Green building finance is well established in the United States, with 24 states enacting legislation between 2008 and 2010 to enable what is referred to as Property Assessed Clean Energy Schemes. The US model allows municipal governments to offer a special bond to financiers, and the revenue raised is then loaned to consumers and businesses to put towards an energy retrofit of either a commercial or residential property. The loans are repaid by an increase in the property tax payable on the property.

The UK is also in the process of establishing a similar mechanism referred to as Green Deals. The Green Deal framework will enable private firms to offer consumers energy efficiency improvements to their homes and community businesses at no upfront cost, and recoup payments through an additional charge on their energy bill. The financial obligation for repayments moves to the next bill payer at the property following a change in occupancy.

Melbourne was the first Australian city to implement a green building finance mechanism. The mechanism is underpinned by amendments to the City of Melbourne Act 2001 that were passed by the Victorian Parliament in September 2010. The amendments allow Melbourne City Council to enter into voluntary tripartite agreements, known as Environmental Upgrade Agreements, with Australian financial institutions and building owners, to finance environmental upgrades for non-residential buildings located within the municipality. Following the establishment of an agreement, the financial institution advances funds to a building owner for environmental upgrade works on the building, and Melbourne City Council then applies a special charge against the property, referred to as an Environmental Upgrade Charge, which is collected on top of rates before being forwarded to the financial institution. Being a council charge, the building owner is able to pass the additional cost of the charge through to tenants as part of the lease arrangement.

Administrative arrangements for the scheme, including a template agreement, have been established by the Sustainable Melbourne Fund (SMF), a commercially oriented independent unit trust established by the Melbourne City Council. The SMF is also responsible for the ongoing administration of the scheme, and operates on a full cost recovery basis. To the end of 2011, the first three agreements have been established, with a combined value of $4.9M and greenhouse gas emission savings of 5270 tonnes CO$_2$e per year. The projects include installation of a trigeneration system, high efficiency chillers, cooling towers, lighting system upgrades, heating and air conditioning units and controls, occupancy sensors and double glazing. The diagram below indicates how this mechanism works in the Melbourne City Council.
Following Melbourne’s lead, the New South Wales Government amended their Local Government Act 2010 in February 2011 to enable Environmental Upgrade Finance to be put in place. Whilst the fundamentals of the NSW scheme are similar to that in Victoria, there are some differences. The NSW mechanism can be applied by all Councils in the state (on an opt-in basis) and strata-titled residential buildings of more than 20 lots are eligible. In addition the building owner does not require tenant approval (simply notification) before entering into an environmental upgrade agreement and passing on the cost of the charge to the tenant providing certain conditions are met. A template agreement for commercial and industrial properties was released on 30 November 2011. The NSW Government is currently developing a template agreement for residential strata buildings and working with a number of major urban councils, building owners and financial institutions to establish implementation procedures.

While the various green building finance mechanisms outlined above differ in their implementation, they share a number of key design features:

- The total expected financial savings resulting from the environmental upgrade should be greater than or equal to the repayment cost of the loan. This ensures that funds are only put towards environmental upgrade projects that are economically viable within the term of the loan.
- The length of the loan should not exceed the useful life of the upgrade measures. Loans are typically in the order of ten years.
- Upgrade measures should be fixed (or “nail-down”) to the property.
- Upgrade measures can be ‘bundled’, enabling measures with longer payback periods to be packaged or blended with measures with shorter payback periods, thereby maximising the total cost savings and environmental benefits while maintaining a commercially viable upgrade project.
- The loan should be appropriately sized, and the total owing on the property should not exceed the capital improved value of the property.
- The existing mortgage holder of the property must receive notice of the pending new property charge prior to building owner entering into a finance agreement.
- The total amount of financing should be net of any direct cash rebates for the upgrade measures applied (such as rebates for solar photovoltaics).

Given that the property and finance sectors operate across Australia, and as the Victorian and NSW mechanisms have been established under similar legislative models, it appears that the Victorian and NSW approaches are the most appropriate and
relevant for consideration in South Australia. The mechanism applies to all categories of commercial buildings – including office, hotel, retail, education, healthcare, public and industrial – as well as large apartment buildings, and pending further investigation, may be able to be applied other residential buildings, district-level infrastructure such as district heating and cooling networks, and possibly also new buildings.

Key Benefits of Establishing Environmental Upgrade Finance in South Australia

Establishing Environmental Upgrade Finance in South Australia offers a number of benefits to the property and finance sectors. Building owners benefit by being able to access capital with attractive terms, cost and tenure (such as lower interest); through increasing the value of their asset; by upgrading their building without carrying all of the cost; and by owning a better performing building that is cheaper to operate and future-proofed against increasing utility prices for both the owner and the tenant. Similarly, financiers benefit from a lower risk investment due to the application of a statutory charge and elevation to Local Government creditor status, and a new pipeline of investment opportunity.

Environmental Upgrade Finance offers a number of benefits to all levels of government. Firstly it does not require large amounts of government funding to implement. It is a voluntary mechanism, and appears to be complementary to a price on carbon. It also appears to complement other energy efficiency and carbon policies, including regulatory approaches such as the Commonwealth's Commercial Building Disclosure Program as well as incentive programs such as the South Australian Government’s Building Innovation Fund and the Adelaide City Council’s City Switch Program.

Environmental Upgrade Finance also offers potential direct economic benefits to governments by generating operational savings in buildings they own or lease without the need to invest their own capital. In the case of the South Australian Government, it would also contribute to South Australian Strategic Plan target 61 to improve the energy efficiency of government buildings by 30% by 2020, and to Action 37 of Water for Good, to implement a retro-fitting program to improve the water efficiency of publicly-owned buildings, and encourage similar water efficiency measures in buildings leased by the Government, and in other private commercial buildings where appropriate.

Council’s investigations suggest that Environmental Upgrade Finance also offers a range of broader potential economic, environmental and social benefits for South Australia.

Energy use in buildings accounts for over a fifth of South Australia’s greenhouse gas emissions, therefore widespread utilisation of Environmental Upgrade Finance offers significant emission reduction potential, thereby contributing to South Australia’s emissions reduction effort.

Water consumption in buildings and their surrounds accounts for a significant proportion of South Australia’s total water demand. The more efficient use of water is a key pillar of South Australia’s water security plan, Water for Good, and a range of actions are being taken to save water. Environmental Upgrade Finance provides a mechanism to further unlock cost-effective water saving measures, thereby contributing to the aim of ensuring that South Australia’s water supplies are secure, safe, diverse, reliable and able to meet the demand of a growing population and a growing economy in a changing climate.

In terms of economic benefits, a report commissioned by the City of Melbourne in 2009 estimated that environmental upgrades of office buildings alone under the City of Melbourne’s 1200 Buildings Program could drive between $0.8 and $1.7 billion in
additional investment in retrofitting construction expenditure. The report also estimated that on average around 800 full time jobs would be directly created each year in the building industry and its supply chain over 11 years.

Australia's carbon pricing mechanism is due to commence on 1 July 2012, for the first time placing a price on greenhouse gas emissions. Environmental Upgrade Finance offers the potential to unlock a significant amount of low cost carbon abatement, thereby minimising the cost to the community of reducing emissions. As illustrated in the carbon abatement curve produced by Climate Works in 2010, the majority of the lowest cost opportunities to reduce emissions in Australia are associated with improved energy use in buildings. Around 50MT of the 250MT of abatement opportunities shown in the cost curve below can be realised by the buildings sector and these opportunities represent almost the entire set of abatement options that generate a societal saving as opposed to a societal cost.

Environmental Upgrade Finance also offers the potential to improve the climate resilience of buildings, which refers to a building's ability to withstand the physical impacts of climate change. In South Australia, this is most likely to be manifested in the thermal performance of buildings during heatwaves, which are projected to become more frequent and extreme into the future. Certain building upgrade measures likely to be implemented through Environmental Upgrade Finance, such as the installation of additional insulation and window shading, will improve the thermal performance of the building during heatwaves, therefore reducing heat-stress for occupants and improving comfort, as well as reducing the demand for air-conditioning, which is a key factor placing upward pressure on electricity costs in South Australia.

The mechanism is therefore attractive to Local and State Governments as it:

- contributes towards carbon and other environmental targets and goals,
- stimulates economic investment,
- reduces energy costs for business, and
- enhances competitiveness with other cities and regions without requiring large amounts of funding to implement.

---

1 Deloitte, June 2009, City of Melbourne – 1200 Buildings – analysis of potential economic benefits
3. Conclusion and Next Steps

In order to realise the economic, environmental and social benefits associated with improved energy and water efficiency in the building sector, the Council has decided to recommend that the South Australian Government pursue the establishment of Environmental Upgrade Finance in South Australia.

Based on its investigations so far, Council suggests that the following steps could be undertaken to establish the mechanism.

1. Engage with the local government sector

   Local government is critical to the establishment and delivery of Environmental Upgrade Finance and the Council recommends that the South Australian Government engage with the local government sector as a first step. The existing Green City Sector Agreement and Local Government Sector Agreement established under South Australia’s climate change legislation provide suitable platforms on which to base this engagement.

2. Agree underpinning design principles and the business model.

   Council is of the view that a key step in the process is to agree underpinning design principles for establishing Environmental Upgrade Finance in South Australia. Proposed principles are that Environmental Upgrade Finance for South Australia should:
   - be aimed at delivering low cost carbon abatement and improving the resource efficiency and climate resilience of buildings;
   - maximise the long term economic and environmental benefits through broad coverage - both geographically and in the types of buildings to which it can be applied;
   - be administratively efficient;
   - be consistent with existing mechanisms in other Australian jurisdictions so as to minimise the administrative burden on finance and property institutions that operate nationally; and
   - provide adequate protection for consumers and stakeholders.

   The business model and the design of appropriate governance and administrative arrangements can then be agreed.

3. Quantify the potential scale of the opportunity and the business case for state and local government.

   An important step in designing the mechanism is to quantify the scale of the economic and environmental benefits and the value for state and local governments, particularly identifying those municipalities in which additional investment is likely to occur. The value generated by a modest uptake of environmental upgrade finance needs to be compared with the cost of administrative and governance arrangements to implement the mechanism.

4. Enact legislative change

   Council understands that legislative amendments to the Local Government Act 1999 are likely to be required in order to provide local governments with the necessary powers to raise an environmental upgrade charge against a property, as well as to establish associated provisions regarding consumer protection, the liability of councils and loan transfer and discharge processes.
5. Establish governance and administrative arrangements

Governance and administrative arrangements for the scheme would need to be determined and agreed by all affected parties. This would include the development of a standard environmental upgrade template agreement, and the establishment of application and assessment documentation and procedures to ensure that only projects that will derive a genuine environmental benefit are approved.