

GREEN INFRASTRUCTURE FOR SYDNEY

THE GREEN INFRASTRUCTURE PLAN

As part of its Sustainable Sydney 2030 plan, the City will turn Sydney into a low-carbon city using locally produced electricity instead of coal-fired power. Sydney will become virtually energy independent and reduce its carbon emissions by 70 per cent from 2006 levels by 2030.

The City is also committed to developing programs to protect and secure water supplies, reduce water use, and cut the amount of waste going to landfill.

ENERGY

The City plans to produce 70 per cent of its energy needs locally from trigeneration systems. These small local generators are nearly three times more energy efficient than coal-fired power plants because they use waste heat to both heat and cool buildings. Other emissions cuts will come from energy efficiency and renewable energy.

Currently, 80 per cent of the City's emissions come from using electricity produced by coal-fired power stations in the Hunter Valley. Two-thirds of the energy used by these stations is wasted as heat, and in transmission over power lines to Sydney.

Electricity prices are expected to rise by 83 per cent over the five years to 2013-14 as NSW energy companies upgrade their networks. The City's local trigeneration systems will offset the need to upgrade the grid and to build new power stations. However, regulations are making it difficult for the City to supply city buildings with local electricity. The City is working with the NSW Government and calling for the removal of these barriers to local energy generation.

WATER

The City is working to reduce its use of drinking water, encourage water-saving by residents and businesses, and improve stormwater quality to keep pollutants out of Sydney Harbour and the Cooks River.

We are also planning for an alternative, sustainable water supply. Sydney relies on Warragamba Dam for nearly all its water. Sustainable Sydney 2030 includes plans for a local decentralised water supply to allow recycled water and stormwater to be re-used for non-drinking purposes. In our local government area, 80 per cent of water is used for non-drinking purposes such as irrigation and toilet flushing. Our water plans also face regulatory hurdles and red tape needs to be cut so that the City can supply water to other buildings. The City is already working to reduce mains water use. We have installed rain gardens to filter stormwater, promote green- ing and help cool the city. We have cut our own use of drinking water by 17 per cent since 2006 by improving park irrigation systems, installing rainwater tanks, stormwater harvesting, and using more efficient water fittings.

WASTE

The City will achieve its target to divert 66 per cent of residential waste going to landfill by 2012, two year ahead of schedule. This is being achieved by sending all of the City's 40,000 tonnes of residential waste to Advanced Waste Treatment facilities, which remove any unseparated recyclable materials and produces a low-grade compost. This also reduces annual greenhouse gas emissions from landfill, by an estimated 6000 tonnes, mostly from methane, equal to removing about 1400 vehicles from the road.

In addition, we have improved waste collection with new recycling bins, expanded garden waste and electronic waste collections.

The City is also investigating advanced waste treatment technologies that can convert garbage into a gas for generating energy, including powering our trigeneration network. Advanced waste collection systems are being investigated, including vacuum systems that use a network of underground pipes to draw rubbish from buildings and street litter bins to a collection station.

For more information visit
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