# Cities Power Partnership Summit

18 October 2018



## **Eastern Suburbs Low Carbon Plan**









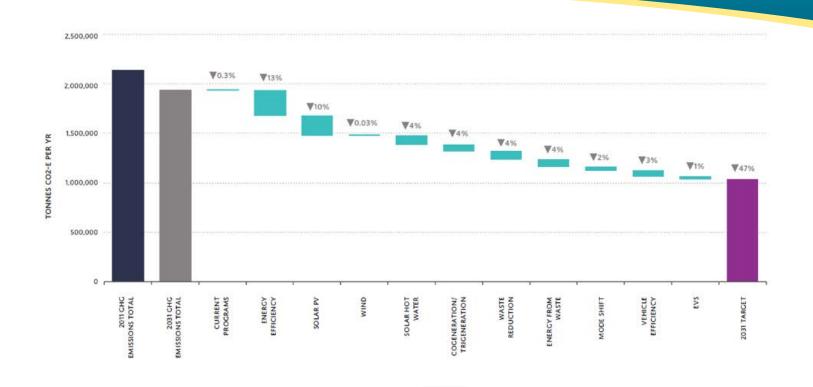
#### EASTERN SUBURBS LOW CARBON FUTURE PLAN

PREPARED BY KINESIS FOR WAVERLEY, WOOLLAHRA & RANDWICK COUNCILS

4 DECEMBER 2015

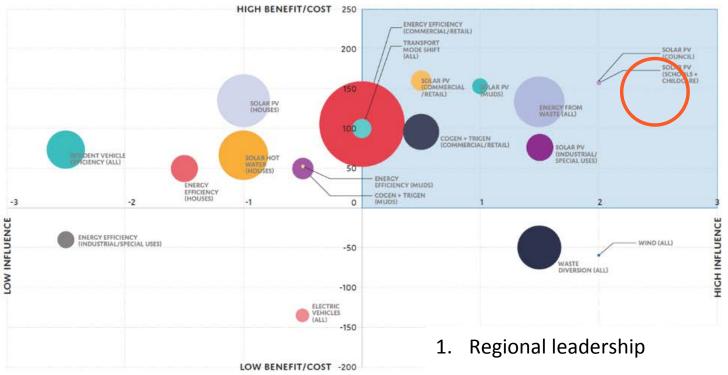


## **What Is Our Pathway To Reducing Emissions?**



## **Identifying priorities**





- 2. Market facilitation
- 3. Regulation / control / advocacy

## A good time for solar







Locals invited to invest in Sydney community solar project, to help make "solar beer"



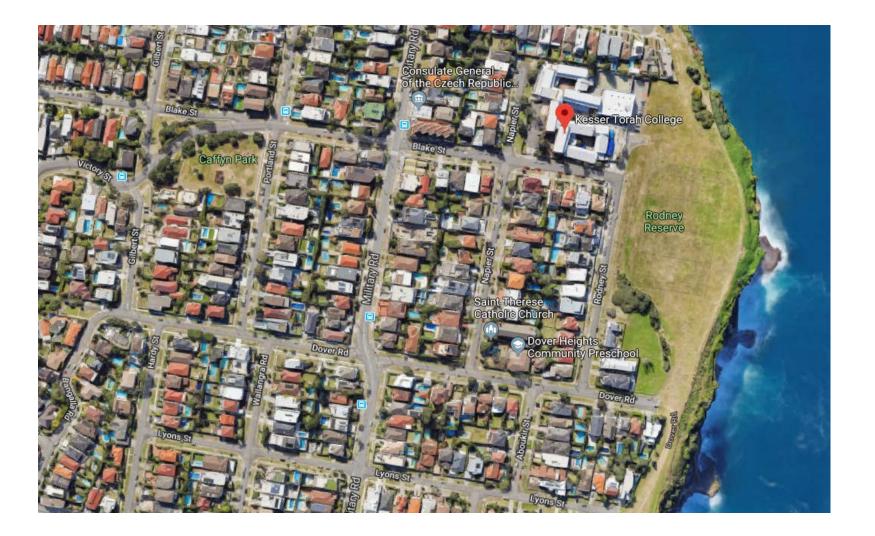
How solar power could help schools spend more on education

Solar panels on school roofs would create a new income stream for headteachers and local authorities



The fall and fall of rooftop solar prices: four years of data





### SOLAR GENERATION

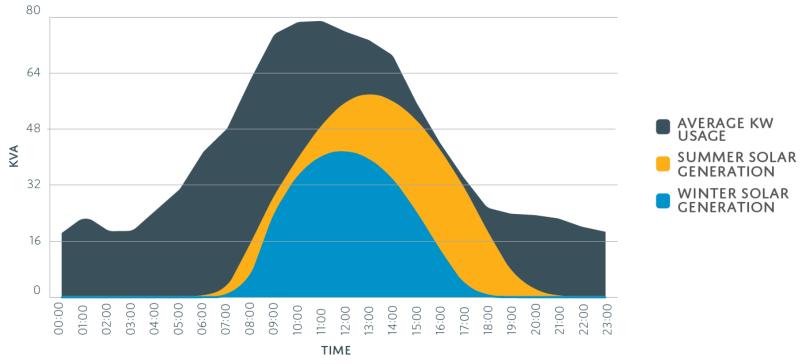


FIGURE 7. Seasonal solar generation for the proposed 99kW solar system superimposed on the average daily load profile.



#### BRONTE PUBLIC SCHOOL



Bronte Public School has installed the largest solar power system on a primary school in the Eastern Suburbs , with the help of the Solar my School program.

The school received funding from the Waverley Council Small Environment Grants program, as well as the NSW Department of Education to help finance the system. Annually the system will:



Save 33% on facility's energy bill



Produce enough power equal to running 220 computers or 8 homes

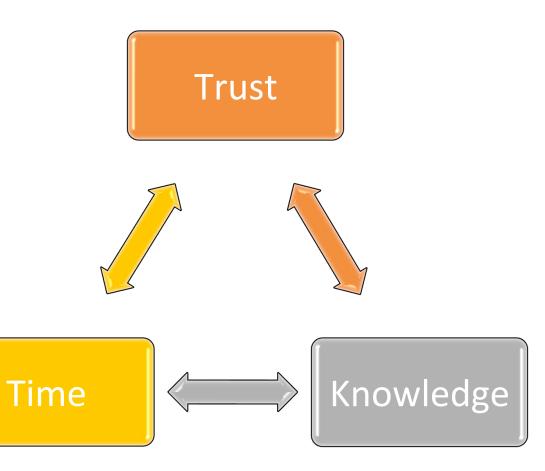


Reduce carbon emissions by 39 tonnes



Equivalent to taking 14 cars off the road





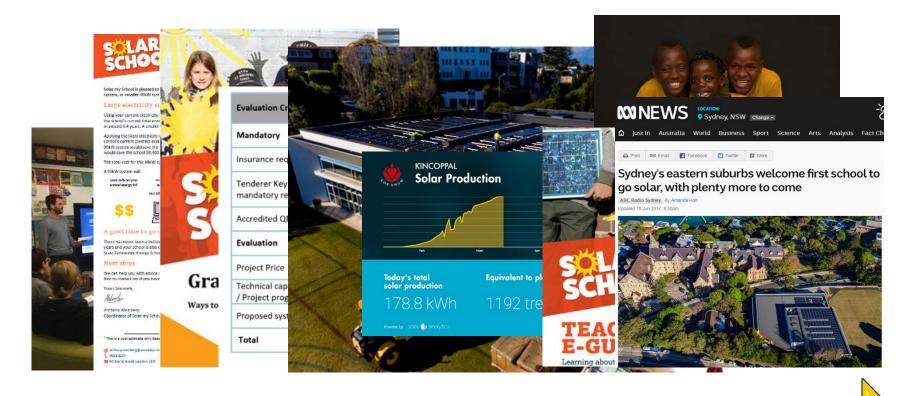
# **Solar my School Pathway**



	Assess feasibility	Seek funding	Install system	Education & promotion
KEY STEPS	<ul> <li>Electricity         consumption and         usage patterns</li> <li>Solar size and         location</li> <li>Costs and savings</li> <li>Payback</li> </ul>	<ul> <li>Internal budget</li> <li>External grants</li> <li>Government assistance</li> <li>Fundraising activities</li> </ul>	<ul> <li>Seek quotes for quality product</li> <li>Select &amp; contract supplier</li> <li>System maintenance &amp; monitoring</li> </ul>	<ul> <li>Launch project</li> <li>Curriculum</li> <li>Community         engagement</li> <li>Role model for         local community</li> </ul>
COUNCIL ASSISTANCE	<ul> <li>Objective advice</li> <li>Feasibility study</li> <li>Site visit</li> <li>Face-to-face meetings</li> </ul> START	<ul> <li>Funding advice and support</li> <li>Assist with grants applications</li> <li>Fundraising ideas</li> </ul>	<ul> <li>Technical specification</li> <li>Contract preparation</li> <li>Tender evaluation</li> <li>Post-install inspection</li> </ul>	<ul> <li>Launch event</li> <li>Council media channels</li> <li>Students engagement</li> <li>Education guide</li> </ul> END

## In pictures





Start Finish

## **Partner schools**



































































### **Overall results**



#### **OUR IMPACT**



2,033

Solar Identified (kWp)



351,725

Cost Savings (\$/yr)



2,495

Locally Produced Clean Energy (MWh/yr)



2,220

CO2 Emissions Avoided (tonnes/yr) = 779 cars off road annually



12,473

Computers Powered Annually



23,496

Student Reach

## Why innovative



- 1. Facilitation model Council as trusted partner
- **2. Leverage funding** bang for buck
- **3. Collective impact** education, financial, social and environmental
- 4. Simple and scalable



# **Council as trusted partner**









## Use Council's knowledge/ IP



#### 27 Council sites have gone solar:

• Waverley: 13 sites

• Woollahra: 6 sites

Randwick: 8 sites

#### **Total = 455kW**





Cooper Park Community Hall



## Leverage Funding

SCHOOL

- 1. Grants Grants Guide
- 2. Solar pays for itself
- 3. Funding Partners









## **Advocacy**









13th September 2017

To the Hon. Robert Stokes MP Minister for the Education

We are reaching out to you to seek your feedback on opportunities and barriers that public schools are facing with regards to solar power.

Waverley, Woollahra and Randwick Councils in Sydney's Eastern Suburbs are committed to reducing greenhouse gas emissions across the region and are working with the community and businesses on a number of local projects to achieve measurable improvements in solar PV capacity.

Our three Councils have developed a targeted program called Solar My School, which aims to help private and public schools nawigate a pash to solar success, from start to finish. The Solar My School program is currently working with 30 of the 71 schools in the Eastern Suburbs to help them choose the right solar power system, set them up with a reliable installer, and provide materials to educate students about the benefits of renewable energy.

The program supports NSW Government policies including the State's aspirational objective of achieving net-zero emissions by 2050. In particular, the program helps to deliver on the Renewable Energy Action Plan by increasing renewable energy projects and investment and building community support for renewables. It also supports implementation of the Government Resource Efficiency Policy by reducing government's operating costs while reducing emissions.

The Asset Management Directorate of the Department of Education is supporting our program by co-funding 50 percent of the installation cost for public schools, with the remaining funding coming from the school itself, the Parents & Citizens Associations (P&Cs) or via grants. A number of our local schools like Coogee Public School, Randwick Public School, Bronte Public School and Bondf Public School have spent the last year fundraising and are on track to install solar systems between 25-40 kW before the end of 2017.

Unfortunately, under the current financial arrangements, although the school pays 50 percent of the cost of the solar installation, there is no guarantee that the school will receive the financial savings from reduced power bills. A school that has installed solar and is therefore using less grid-electricity will be able to retain the savings temporarily, until the DoE's Schools' Finance Team recalculates the school's base allocation for utilities.

What this means in practice is that there is little encouragement or incentive for many of the schools or P&Cs to contribute to the cost of installing solar. Schools like Randwick Girls High, South Coogee Public and Rose Bay Public are ideal sites for solar, each have completed feasibility studies and have raised funds but have decided not to progress to the tender stage because there is no guarantee that the school will receive any of the financial benefit over the medium to long term.



#### Rob Stokes Minister for Education

Mr Anthony Weinberg 3-Council Regional Environment Program Coordinator Waverley, Woollahra and Randwick councils RML17/3235 RML17/3201

Anthony weinbero@waverlev.nsw.gov.au

Dear Mr Weigherg anthony

I write in response to your emails regarding the Solar My School Program, and your recent meeting with my office and School infrisstructure NSW staff on 26 October 2017. It was a pleasure to meet you and your colleague Nicole Saltman at the opening of the new facilities at Bellevue Hill Public School.

I have sought clarification and advice from the Department of Education on this matter and I am advised of the following.

The department supports schools looking to reduce emissions and energy costs through the installation of solar power. The NSW Government velocines initiatives like Solar My School that work with schools to assist in the selection of appropriate renewable energy systems.

I appreciate that the current arrangements do not provide for financial savings or the recovery of installation costs by schools for generating solar power. I have asked School infrastructure NSW to investigate options for provide effective and equitable incentives for schools to invest in renewable energy sources. Your proposal for an atemative model that allows schools to receive a financial benefit is noted and will be considered as part of this process.

Schools that have installed solar PV systems under the department's current arrangement will be informed of the outcome of this investigation and any associated changes to funding under the current Resource Allocation Model and financial business rules.

I encourage you to continue to work with School Infrastructure NSW to promote sustainability and renewable energy generation in NSW public schools.

Should you require any further information or assistance, you may wish to contact Mr Robert Fraser, Group Director, Property and Facilities Management, School Infrastructure NSW, by telephone on 9551 9393 or email at Robert Fraser/3@dec new edu au.

Thank you for bringing the Solar My School initiative to my attention.

Yours sincerely

Rob Stekes

Minister for Education

\* 7 NOV 2017

Mail: GPO Box 5341, Sydney NSW 2001 Phone: (B1 2) 8574 6707

# Scale up the impact





### **Our future**



- 1. Expansion
- 2. Childcares
- 3. Clubs
- 4. Batteries
- 5. Rental properties
- 6. Other Councils







# Thank you!



