

ENVIRONMENT COMMITTEE MEETING

BUSINESS PAPER

TUESDAY 12 MARCH 2013

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ENVIRONMENT COMMITTEE MEETING

Notice is hereby given that an Environment Committee Meeting of the Council of the City of Randwick will be held in the Council Chamber, Town Hall, 90 Avoca Street, Randwick, on Tuesday, 12 March 2013 at 6:00 p.m..

Committee Members: The Mayor (T Bowen), D'Souza, Matson (Deputy Chairperson), Moore, Nash, Neilson, Roberts, Seng & Shurey (Chairperson)

Quorum: Five (5) members

NOTE: At the extraordinary meeting held on 22 May 2007, the Council resolved that the Environment Committee be constituted as a committee with full delegation to determine matters on the agenda.

Apologies/Granting of Leave of Absences

Confirmation of the Minutes

Environment Committee Meeting - 12 February 2013

Declarations of Pecuniary and Non-Pecuniary Interests

Address of Committee by Members of the Public

Privacy warning:

In respect to Privacy & Personal Information Protection Act, members of the public are advised that the proceedings of this meeting will be recorded for the purposes of clause 66 of Council's Code of Meeting Practice.

Urgent Business

Greening Randwick Reports

Nil

Environment Reports

E6/13	Overview of annual results of Randwick's Gross Pollutant Traps, 2008 - 2011	1
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Notice of Rescission Motions

Nil

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Ray Brownlee
GENERAL MANAGER

Environment Report No. E6/13



Subject: Overview of annual results of
Randwick's Gross Pollutant Traps,
2008 - 2011

Folder No: F2005/00322

Author: Gary Stone, Road Services Coordinator

Introduction

This report provides an overview of the results of Randwick's Gross Pollutant Traps.

Issues

With the annual Clean Up Australia Day just completed and the involvement of community groups around our City in reducing the amount of litter at our popular parks and beaches, it is probably an appropriate time to examine the results and performance of Council's Gross Pollutant Traps, or GPTs, in reducing street litter and other material from travelling along our street drainage network and being washed via these drains to our beaches and other waterways.

Council currently has a total of 26 GPT systems installed across the City, from 1 to 3 metres in diameter to baskets and 'nets' catching material as it comes out of the street drainage network. Some are constructed to a depth of 7 or 8 metres in the ground due to the need to catch material at the lowest point of drainage to our waterways and beaches.

The total of material captured by these 26 GPTs is consistent over the years that data is available, from 2008 to 2011, with an average of just over 200 tonnes of combined organic material, sediment and litter prevented from washing into our oceans or onto our beaches each year.

Of these 200 tonnes per annum, approximately 50 to 65 percent is organic material (grass, leaves and twigs), 25 to 35 percent is sand or sediment, and the remaining 5 to 15 percent represented as litter material.

Of course some locations, especially around Coogee beach, have much higher volumes of sand and sediment, while areas around La Perouse and Yarra Bay generally have higher volumes of organic material.

The highest volumes of material consistently appear to be around the beach catchments especially Coogee, Clovelly and Maroubra.

GPT volumes removed per year from Randwick's drainage network

2008	2009	2010	2011
223 tonnes	208 tonnes	198 tonnes	213 tonnes

There is little data from the 5 more recently installed GPTs around the Randwick Environment Park but data should become available over the current calendar year. It is intended to conduct an audit of all GPTs during the current year to assess repairs or other issues required to maximise ongoing performance in screening material out prior to them potentially being washed via the drainage network onto our beaches.

E6/13

Relationship to City Plan

The relationship with the City Plan is as follows:

Outcome 6: A liveable city.

Direction 6(b): Our town centres, beaches, public places and streets are safe, inviting, clean and support a recognisable image of our City.

Outcome 10: A healthy environment.

Direction 10(d): Sustainable alternative waste technologies and environmentally sound collection systems are identified and implemented.

Financial impact statement

Approximately \$120,000 is allocated per year to cover inspections, cleaning and waste disposal costs of all of Randwick's Gross Pollutant Traps.

Conclusion

Gross Pollutant Traps are a recognised approach to minimise the amount of street litter, organic material and sediment from reaching and impacting upon the water quality and enjoyment of our beaches by our residents and visitors to the City. While most areas likely to benefit from GPTs have been installed, regular reviews of locations are conducted to inform Council staff of the need of any additional GPTs, particularly in relation to new or larger scale developments around the City.

Recommendation

That the report be received and noted.

Attachment/s:

Nil

E6/13

Environment Report No. E7/13



Subject: Waste and recycling improvement project at Bilga Crescent, Malabar

Folder No: F2008/00413

Author: Matshepo Molala, Waste & Sustainability Education Officer

Introduction

The purpose of this report is to inform Council on the waste and recycling improvement project being trialled for public housing tenants around Bilga Crescent, Malabar.

A number of Housing New South Wales (Housing NSW) areas have ongoing problems with contamination of recycling being placed into yellow-lidded bins leading to a substantial reduction in resource recovery from these areas.

With the assistance of Kooloora Community Centre, Council initiated a trial project with Housing NSW, working with Bilga Crescent tenants as a means of:

- enhancing the volume of resource recovery from recycling bins
- improving waste and recycling infrastructure around Bilga Crescent; and
- improving information and education for local residents.

Issues

In close consultation with Housing New South Wales, Council has been developing and implementing a trial project aimed at improving waste and recycling infrastructure and education for residents in public housing areas. Through this project, Council and Housing NSW have installed three new bin enclosures at strategic locations around Bilga Crescent, jointly funded by Department of Housing and Council through the Waste and Sustainability Improvement Program (WaSIP). Following installation, educational signage and materials were delivered to the local community including at various tenants meetings.

The project has included ongoing monitoring of results, particularly the level of contamination in the recycling bins and so the effectiveness of education programs and infrastructure changes. The community has also been kept informed of results and through their feedback adjustments have been made to educational material and messages provided.

There has been a marked improvement in overall resource recovery since the project commenced, with the number of recycling bins rejected due to contamination steadily reducing. Further improvements are expected as the project continues.

Illegal dumping

Illegal dumping is also very prevalent around public housing areas. Council continues to work with Housing NSW to find options to improve waste services and reduce incidents of illegal dumping. Areas have been identified for bulky waste storage where residents are permitted to place their bulky waste ahead of booked or scheduled household clean-ups.

E7/13

Relationship to City Plan

The relationship with the City Plan is as follows:

Outcome 10: A Healthy Environment.

Direction 10(e): Our community is encouraged to implement waste minimization strategies.

Financial impact statement

The funding of this trial project is through the Waste and Sustainability Improvement Program paid to Council from the NSW Government. \$50,000 is allocated to the infrastructure improvements and \$20,000 for the signage and educational materials.

Conclusion

Council continues to work in partnership with Housing NSW and public housing residents to improve waste and recycling infrastructure, reduce illegal dumping in these areas and improve the level of resource recovery from yellow-lidded recycling bins. The initial monitoring shows a substantial improvement in resource recovery and a reduction in recycling bin contamination. Further work will continue with the local community to build on these improvements. Results are expected to lead to an extension to other public housing areas.

Recommendation

That the report be received and noted.

Attachment/s:

Nil

E7/13

Environment Report No. E8/13



Subject: Update on the monitoring platform for Council's renewable energy projects

Folder No: F2004/07259

Author: Choonghan Yeo, Sustainability Projects Officer

Introduction

This report seeks to provide an update on the web platform utilised by Council to monitor and report on the amount of renewable energy generated through the installation of solar photovoltaic (PV) systems on Council buildings including the small scale wind turbine located at Randwick Community Centre. This system also calculates and reports on the greenhouse gas emissions avoided through the generation of this renewable energy.

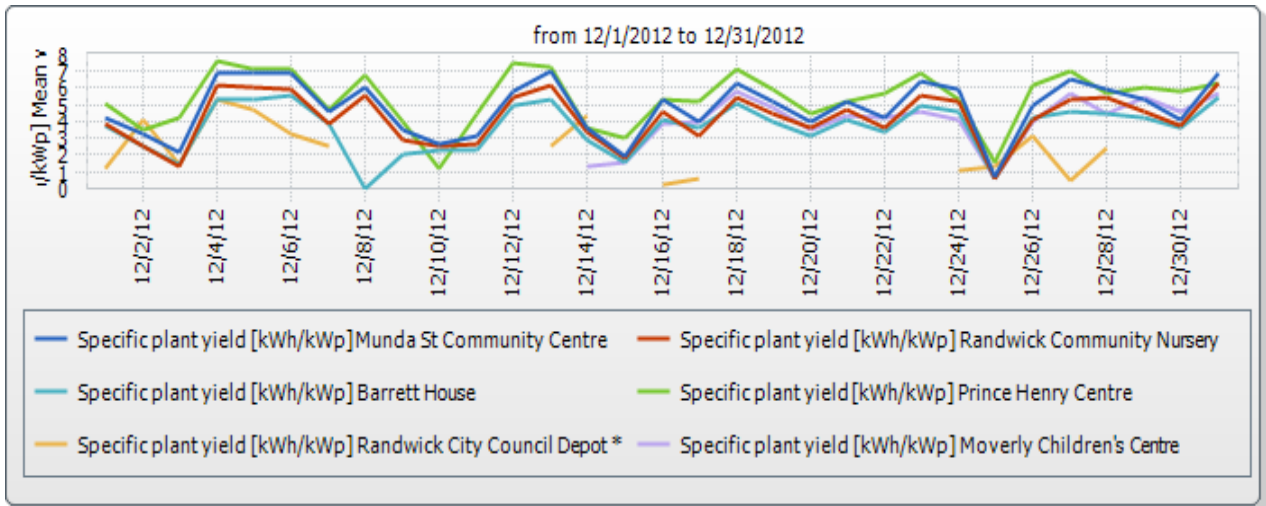
Issues

As part of Council's Energy and Greenhouse Emission Management Plan, Council is committed to increasing renewable energy generation and reducing greenhouse gas emissions through the completion of various renewable energy projects across appropriate Council sites and facilities. Each new project will include connection to our renewable energy monitoring platform which will help us account for the amount of electricity generated from these projects and the equivalent greenhouse gas emissions avoided or offset.

A snapshot of the monitoring results is shown below:

Devices/Plants	Daily Yield Meter Change [kWh] 31/12/2012	Monthly Yield Meter Change [kWh] December 2012	Year to Date Yield Meter Change [kWh] 2012
Munda St Community Centre	14.47	315.84	976.15
Randwick Community Nursery	12.57	261.83	580.84
Barrett House	10.84	237.35	458.60
Prince Henry Centre	12.70	339.58	712.98
Randwick City Council Depot *	98.15	4675.75	49390.17
Moverly Children's Centre	11.44	145.04	145.04
	160.17	5975.39	52263.78
	[Total]	[Total]	[Total]

E8/13



Based on the information above, we can determine that the monthly electricity generation for the 6 Solar Photovoltaic (PV) systems and small scale wind turbine are approximately 5,975.4 kilowatt-hours per month. The 10 kilowatt PV system installed on the roof of the Administration Building is not currently connected to this reporting platform but steps are in place to capture this additional data as soon as possible.

The total renewable energy generation estimated for the year is approximately 52,263.8 kilowatt-hours. This also equates to a monthly greenhouse gas emission of 6.3 tonnes and the total reduction for the year around 55.4 tonnes (CO₂-e). The equivalent amount of dollars saved through these renewable energy projects annually is approximately \$2,634. It should be noted that daily yield values fluctuate across a broad range of values influenced by seasonal changes in weather, excessive cloud and overcast conditions and lower periods of sunlight.

Relationship to City Plan

The relationship with the City Plan is as follows:

- Outcome: 10: A Healthy Environment.
- Direction: 10(g): Greenhouse gas emissions are reduced.

Financial impact statement

The cost of installing and connecting this monitoring system to existing Council sites is \$9,940 (ex. GST). This is being paid for through the Climate Change budget of the Environmental Levy Program.

Conclusion

The installation of the monitoring platform for Council's existing renewable energy systems provides accountability and helps determine energy savings in terms of energy generation and dollars saved. It also determined the amount of greenhouse gas emissions avoided based on the amount of renewable electricity generated. This valuable information can be used in reporting obligations such as the State of the Environment Report and can be used as a tool to inform and educate residents on Council's commitment to renewable energy and greenhouse emissions reduction.

Recommendation

That the report be received and noted.

Attachment/s:

1. Screen capture data showing daily generation of renewable energy at Council sites.

E8/13

Electricity Generation from Renewable Energy Projects



24/12/2012

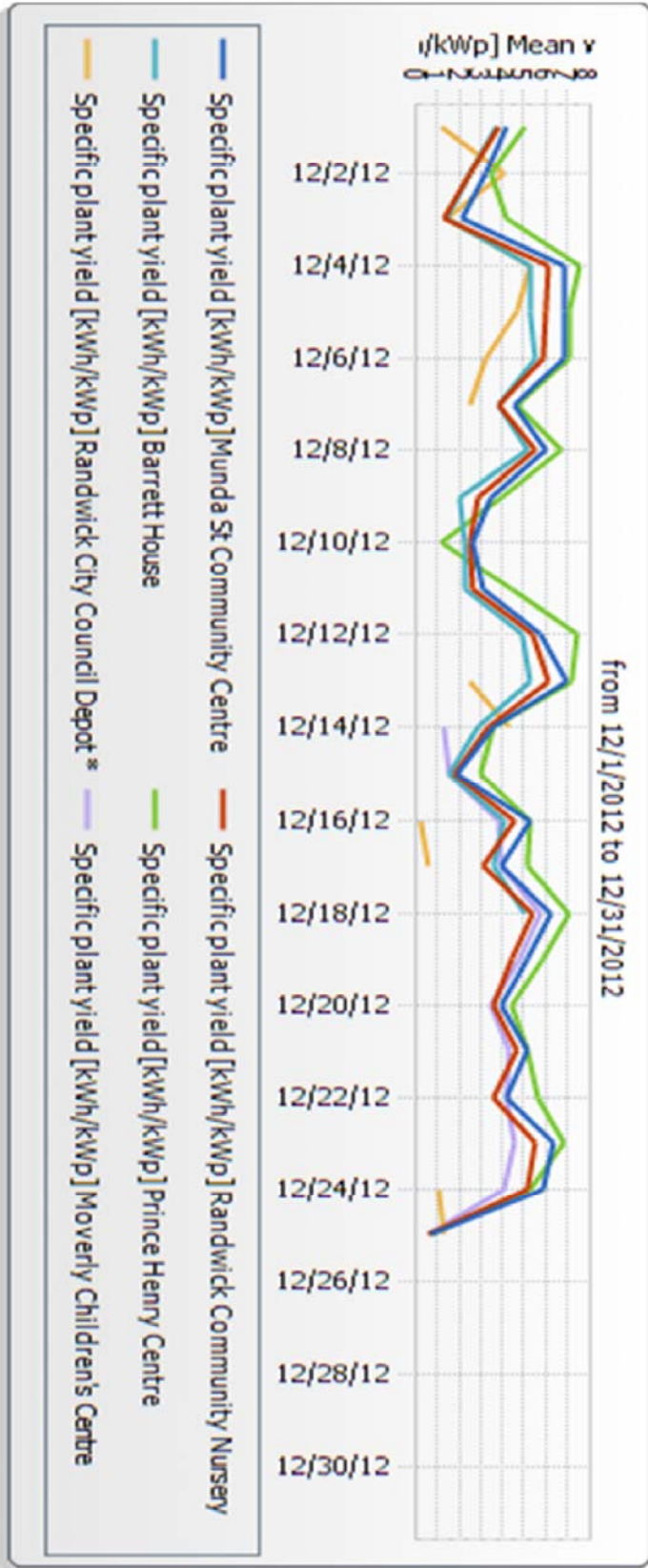


E8/13

Electricity Generation from Renewable Energy Projects



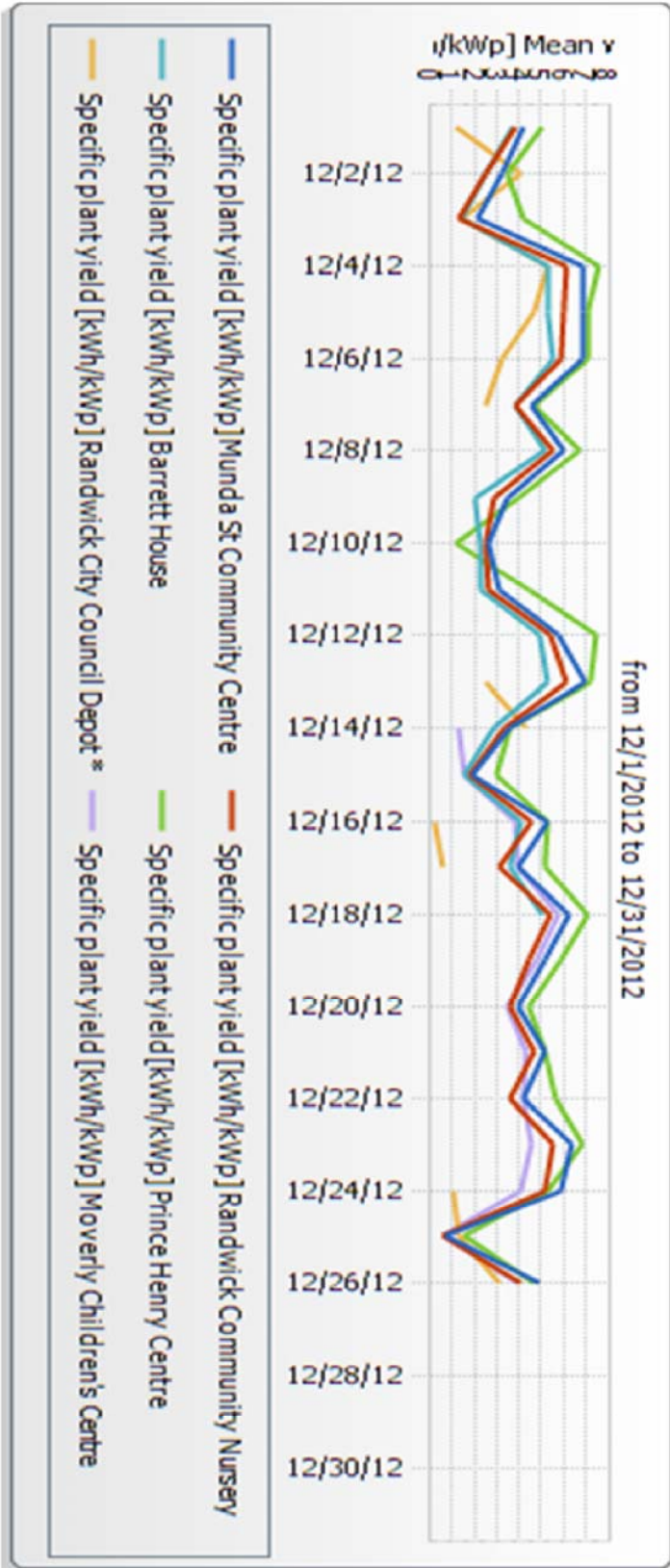
25/12/2012



Electricity Generation from Renewable Energy Projects



26/12/2012

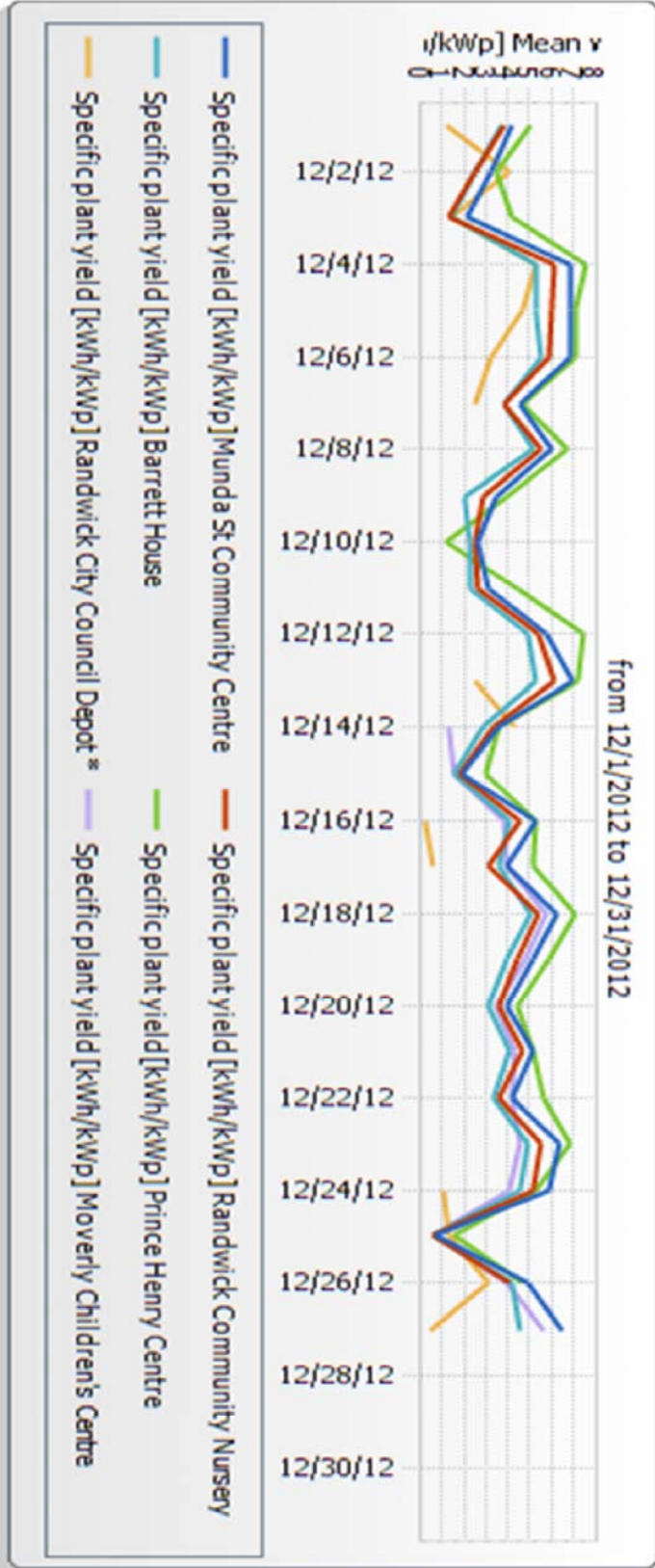


E8/13

Electricity Generation from Renewable Energy Projects



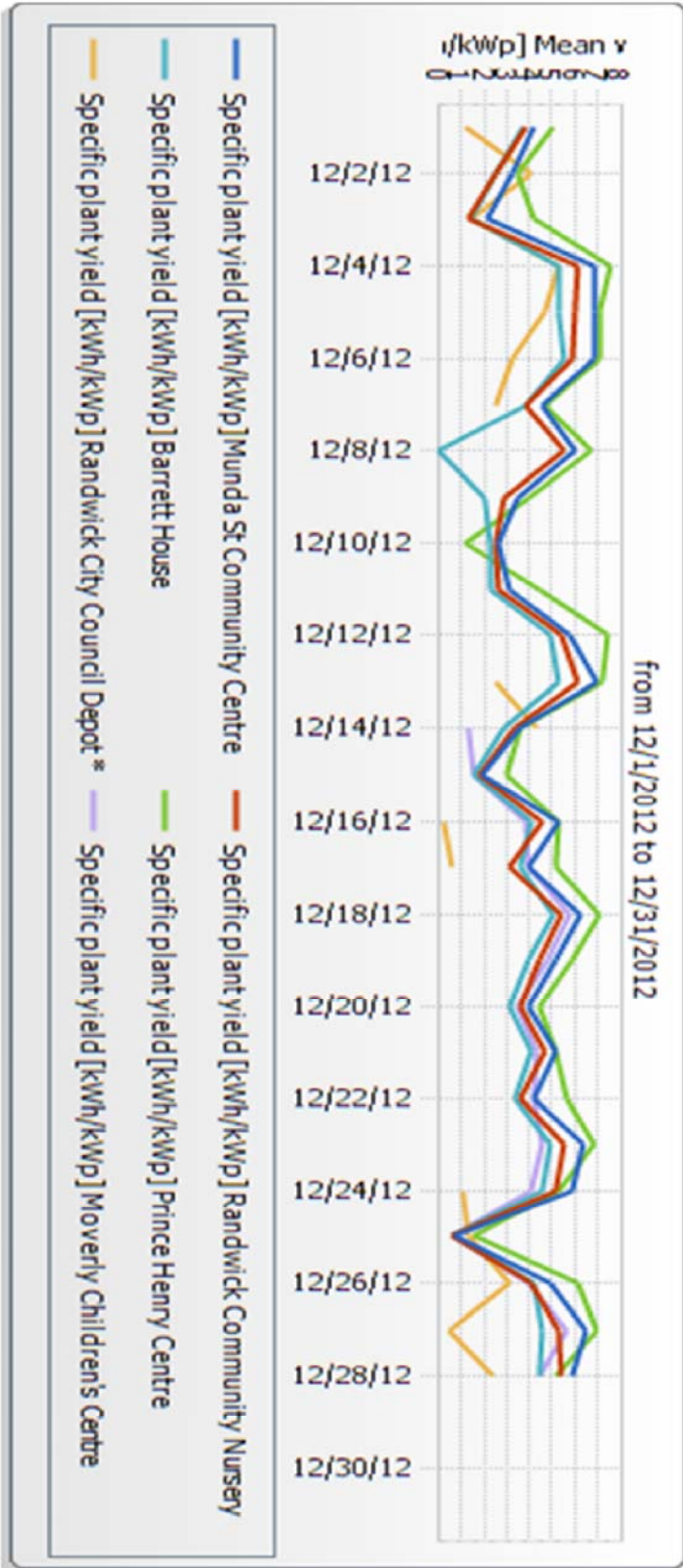
27/12/2012



Electricity Generation from Renewable Energy Projects



28/12/2012

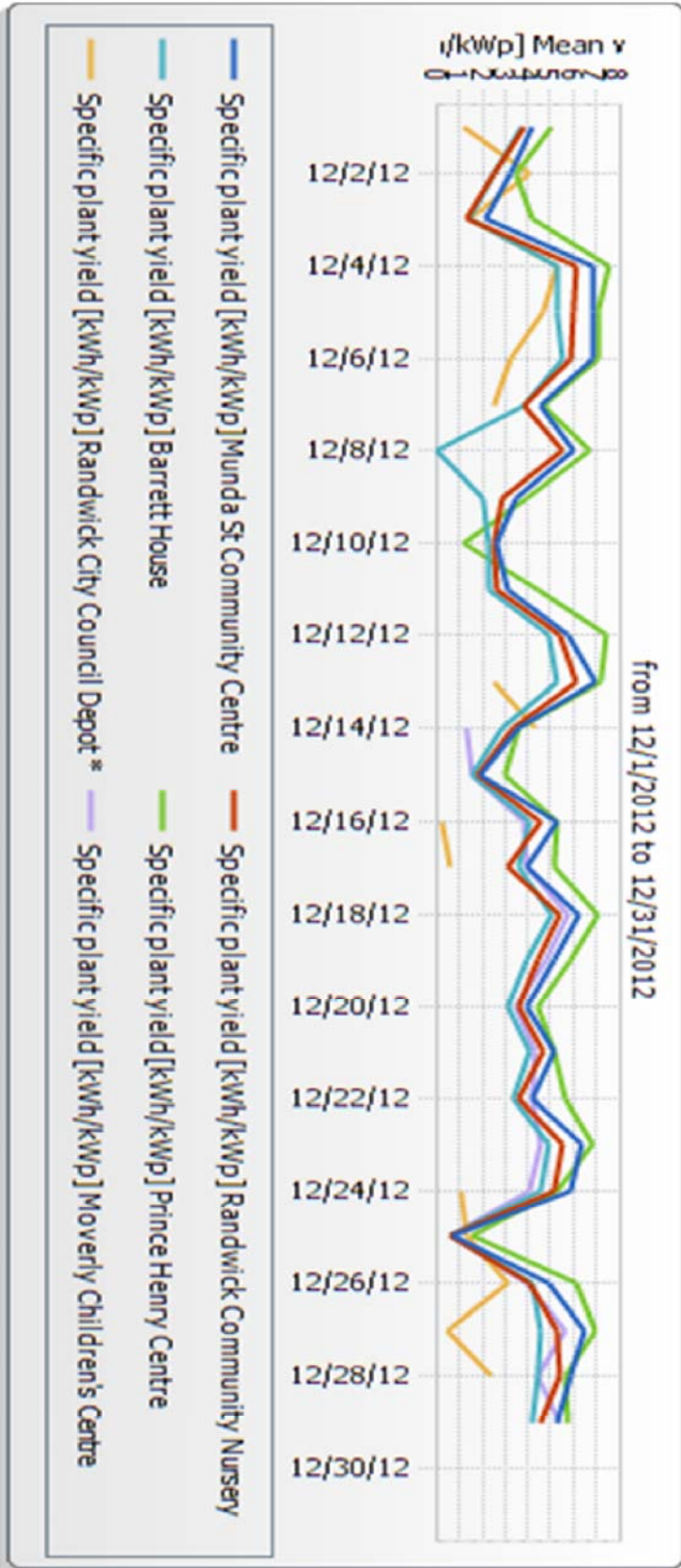


E8/13

Electricity Generation from Renewable Energy Projects



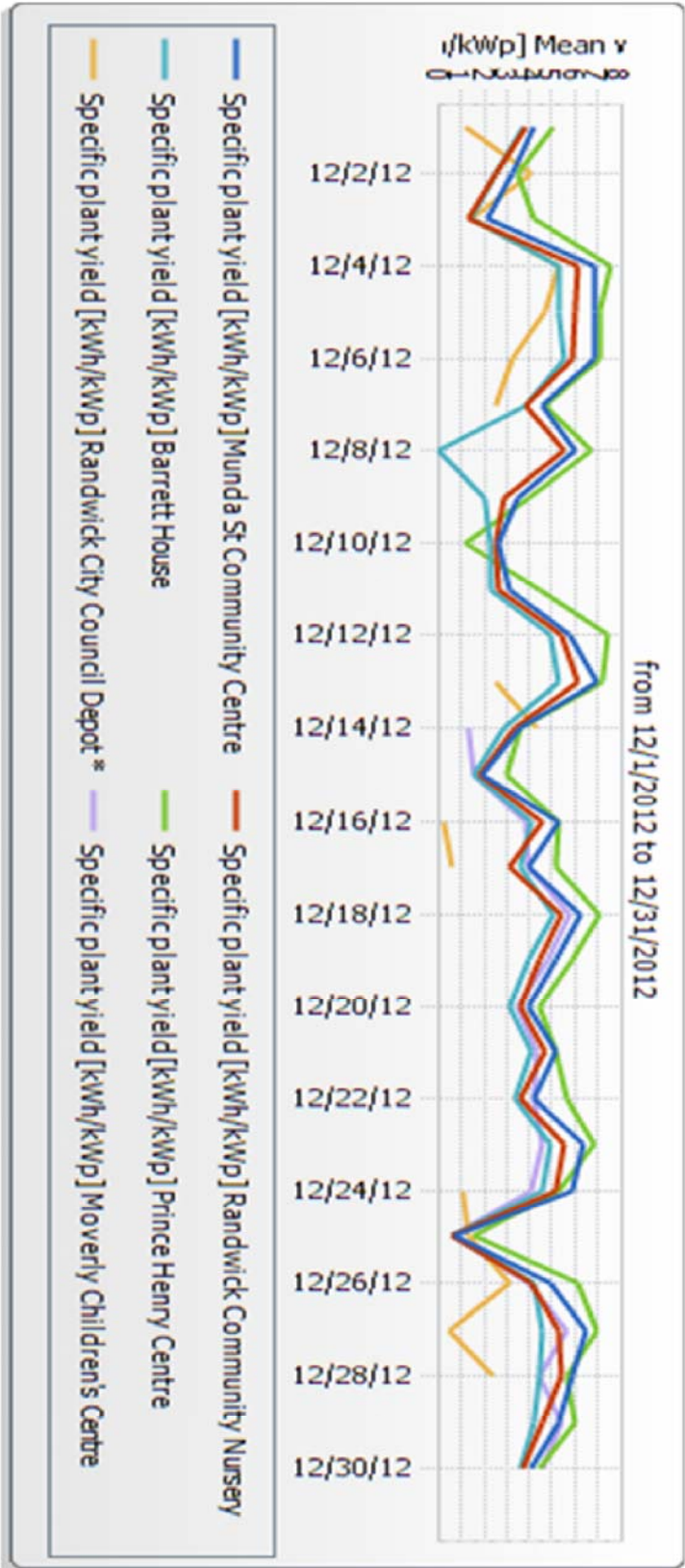
29/12/2012



Electricity Generation from Renewable Energy Projects



30/12/2012



E8/13

Electricity Generation from Renewable Energy Projects



31/12/2012

