



Carbon Neutral Program

Public Disclosure Summary



An Australian Government Initiative



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AUSTRALIA

1. Organisation and Product Information

Organisation Name: Zoos Victoria

Base Year: 2011/12

Disclosure Period: From: July 1, 2011 to: June 30, 2012

Date of most recent verification: 30 Jan 2013

Carbon Neutral Disclosure Type: Organisation

2. Organisation Description

Zoos Victoria is a not-for-profit conservation organisation aimed at saving endangered wildlife from extinction. Zoos Victoria operates Healesville Sanctuary, Werribee Open Range Zoo and Melbourne Zoo. Combined these zoos see more than 1.9 million visitors each year and Zoos Victoria is dedicated to connecting these visitors to wildlife and providing them with actions they can take to help save species in the wild. Zoos Victoria sees first-hand the impact of climate change and other human-induced threats to wildlife and this has spurred the organisation to take great lengths to decrease its environmental footprint.

For the purposes of certification, Zoos Victoria defines its organisational boundary in accordance with NCOS. More specifically, Zoos Victoria adopts an operational control consolidation approach to defining its boundary definition. All corporate group members and facilities are included in the boundary, including:

- i. the controlling corporation – Zoos Victoria
- ii. subsidiaries – includes Liberty catering that operate within the Zoos Victoria boundary
- iii. joint ventures - none
- iv. partnerships – none

The Zoos Victoria emissions boundary definition includes all scope 1 & 2 emissions and scope 3 emissions from business air travel, staff travel to and from work, waste to landfill, energy supply, paper use, reticulated water and the supply of animal foods. Scope 3 emissions are included on the basis of materiality and measurability. The diagram overleaf identifies key Zoos Victoria activities (applicable and measured at all sites), together with the breakdown of emission sources and the organizational boundary for emissions.

Carbon Neutral Program

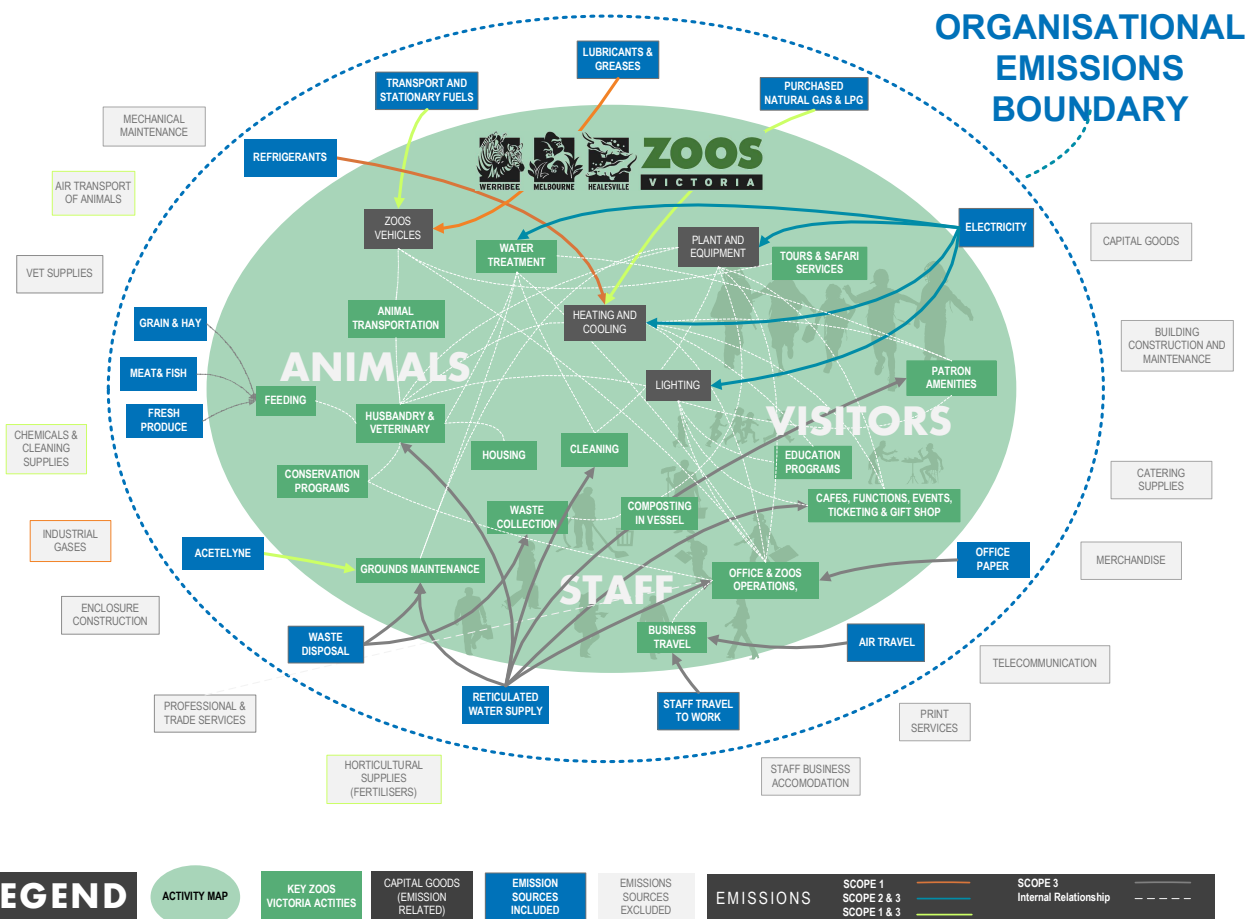
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3. Purchase of Greenpower™ or NCOS Carbon Neutral Products and/or Cancellation of Greenpower™ Eligible Renewable Energy Certificates (RECS)

GreenPower™: 0 MWh

GreenPower™ eligible RECs: 0 MWh

4. Total Carbon Footprint

[From the most recent verified GHG Inventory or Life Cycle Assessment]

Emission source	Tonnes CO ₂ -e
Acetylene (scope 1 and 3)	0.03
Grease and lubricants (Scope 1)	0.59
Refrigerant losses (scope 1)	45.72
Mobile transport – diesel consumption (scope 1&3)	259.40
Mobile transport – petrol consumption (scope 1&3)	115.81
Mobile transport – B20 diesel (scope 1&3)	30.40
Mobile transport – LPG (scope 1&3)	3.50
Heating and building use – Natural gas consumption (scope 1&3)	730.95
Building – LPG usage (scope 1&3)	14.74
Building – electricity usage (scope 2&3)	9,223.63
Reticulated water supply (scope 3)	460.00
Air travel (scope3)	83.36
Non-animal waste (scope 3)	1,738.30
Paper (scope 3)	4.00
Animal food (scope 3)	1,434.60
Emissions from Employee travel to and from work (scope 3)	768.81
Total Emissions	14,913.84

Emission Scope	t CO ₂ -e
Scope 1	- 1,117.94
Scope 2	- 8,191.14
Scope 3	- 5,604.77
Total Emissions	- 14,913.84

5. Emission reduction measures

Since 2008, Zoos Victoria has an over arching Environmental Policy¹ and Strategy² to manage all environmental impacts associated with operating our zoos. Our Climate Change - Carbon Neutrality for Zoos Victoria strategy uses the widely accepted Carbon Management Principles to reduce our emissions. So far we have implemented a number of resource efficiency projects saving approximately 2,140 tonnes of CO₂-e emission per year. These projects include lighting efficiency, heating and cooling efficiency, insulation, heat pump hot water systems and small scale solar installations. We have also recently invested in an in-vessel composting plant with will negate 960 tonnes of CO₂-e per year from emissions associated with organics waste to landfill. To further reduce waste to landfill we have started collecting public organics waste through a green waste bin system at Melbourne Zoo. This new organics waste stream is now diverted from landfill into our in-vessel composter reducing greenhouse gas emissions. We have also invested in upgrading our glass at the butterfly house which will further reduce our emissions.

Going forward, we will be looking to continue or resource efficiency programs to further reduce our operational impacts and our emissions. We will also be looking at developing renewable energy options on site to provide green power and efficiency savings to our zoos. Possible renewable and energy efficiency options include:

- Solar PV at Zoos Victoria's Corporate Office and above zoo exhibits.
- Natural gas fired co-generation located at Melbourne Zoo and Healesville Sanctuary.

Emission Management and Reduction Measures	Emissions Reduction in Reporting Period (Tonnes CO ₂ -e)
Lighting	261
Heat pump Hot Water	168
VSD Pumps	133
Solar PV	9
Reflective Paints	3
HVAC upgrade	34
Computer switch off campaign	91
Butterfly House - Double Glazing	46
In-vessel composter	960
Greener fleet 'car' vehicle	18
Water projects	172
Other Waste Projects	236
Insulation	9
Total Emissions Reduction	2140

¹ http://www.zoo.org.au/sites/default/files/ZV-environmental-policy_0.pdf

² <http://www.zoo.org.au/sites/default/files/ZV-environmental-sustainability-strategy-2010.pdf>

6. Offset Purchase / Cancellation

Offset Type <i>Refer NCOS 3.1</i>	Registry	Serial Numbers	Offset Quantity (Tonnes CO ² -e)
VCU INFAPRO Rehabilitation of logged-over dipterocarp forest in Sabah, Malaysia	MarkIT	1597-66133554- 66136479-VCU-006- MER-MY-14-672- 01012007-31122010-0	2,926
VCU Redd Forests Grouped Project: Protection of Tasmanian Native Forest	MarkIT	1613-67377877- 67386654-VCU-006- MER-AU-14-641- 01042010-30062011-0	8,778
VCU Redd Forests Grouped Project: Protection of Tasmanian Native Forest	MarkIT	1613-67386655- 67386939-VCU-006- MER-AU-14-641- 01042010-30062011-0	285
VCU 2 x 3.5 MW Ullunkal Hydro Power Project in Kerala, India.	APX VCS Registry	2415-103133311- 103136236-VCU-003- APX-IN-1-869- 01122009-31122009-0	2,926

7. OTHER INFORMATION

8. Verifier

Name of verifier: NDEVR Environmental Consulting

Last year of verification: 2011-12

9. Declaration

Name Mr Kiam Yoong

Title Manager Environmental Sustainability

Date 15/03/2013

Signature



This Public Disclosure Summary was prepared in accordance with the requirements of the NCOS Carbon Neutral Program Guidelines.