



CASE STUDY

JANUARY

2014



Living Planet Centre

BUILDING INFORMATION CASE STUDY

From October 2013 WWF-UK occupied a new HQ; the Living Planet Centre.

So, what was the project?

The Living Planet Centre, designed for WWF-UK by Hopkins Architects, sits on a raised platform beneath an overarching curved roof. Behind its visitor centre the building opens to a two-storey workspace centred on a full height atrium. The LPC was constructed by Willmott Dixon with a specialist team committed to the highest standards of sustainable construction.

What low-impact features make this building innovative?

The Living Planet Centre's 80m arched diagrid roof features photovoltaic panels for solar energy and extensive glass to maximise natural light. Four specially-designed recycled aluminium wind cowls provide natural ventilation as air circulates through the building. The water management system includes rainwater harvesting and grey water recycling; ground-source heat pumps and ground air heat exchangers (earth ducts) mean less energy is used for heating and cooling the building, and there is extensive use of sustainable technology. All materials used in construction were responsibly sourced and analysed for their embodied carbon; substitutions were made in favour of materials with the least whole life carbon impacts. All wood comes from responsibly managed forests and some of the refurbished technology was originally used to power the London 2012 Olympic Games.



WWF reception & Experience area

Photography by Richard Stonehouse

And now for the stats...

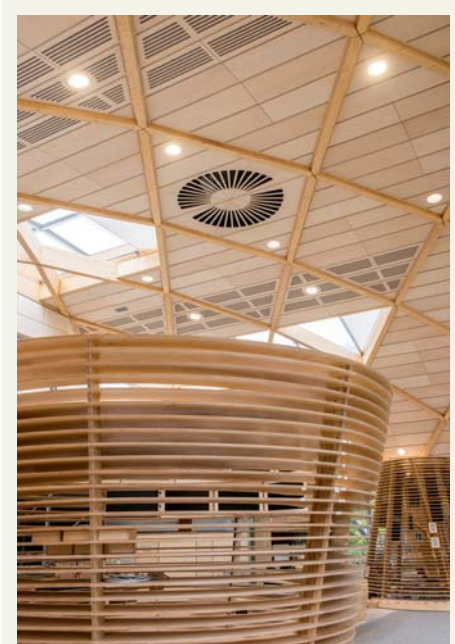
Basic Building Cost - £/m ²	£2,609/m ²
Services Cost - £/m ²	£1,039/m ²
External Works - £/m ²	£234/m ²
Gross floor area – m ²	3,675m ²
Total are of site – hectares	0.8 hectares (8,298 m ²)

Function areas and their size (m²)

Area	Mezzanine (m ²)	Entrance level (m ²)
Auditorium	161	
Meeting rooms	172	21
Project room	32	
Breakout	89	111
Circulation	251	810
Store	15	6
Lift	5	5
Stairs	36	36
Open plan workspace	584	497
Riser	16	16
Learning zone		90
Learning zone breakout		28
Boardroom		55
Boardroom breakout		32
Post room		42
IT set-up room		14
IT server room	2	9
Kitchens	13	19
WCs & showers	26	110
Stationery store		13
Library area		4
Reception		62
Recording studio		13
Digital editing suite		13
Business centres		9
Knowledge room		23
Eat and meet area		44
WWF experience		169
Tea station		4
Learning zone store		8
Drying room		5

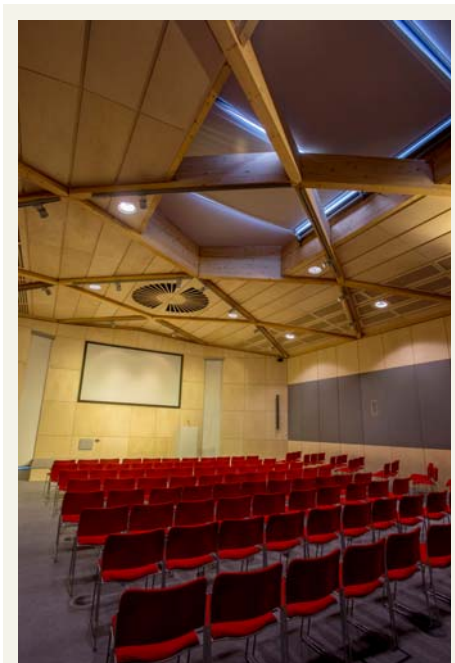
Further figures

Area of circulation (m ²)	1,061 m ²
Area of storage (m ²)	42 m ²
% area of grounds to be used by community	100%
% area of buildings to be used by community	11%
Predicted electricity consumption – kWh/m ²	26.7 kWh/m²/year for heating, cooling, lighting and hot water 48.17kWh/m²/year for small power (i.e. appliances)



WWF Experience

Photography by Richard Stonehouse



Auditorium

Photography by Richard Stonehouse



Wind cowl

Photography by Richard Stonehouse



Earth ducts

Photography by Richard Stonehouse

Predicted fossil fuel consumption kWh/m ²	65.17 kWh/m ² /year
Predicted renewable energy generation kW/m ²	9.7 kWh/m ² /year (13%)
Predicted water use	2.6 m ³ /person/year
% predicted water use to be provided by rainwater or greywater	84%

Steps taken during the construction process to reduce environmental impacts

- Highly efficient site accommodation connected to 7 day 24 hour timer to switch off non-essential parts of the cabins outside of work hours.
- A 30 minute monitoring system of site energy and water was used allowing the contractor to review energy use and ensure that any peaks or outliers were explained and dealt with efficiently.
- Early connection to the grid was obtained in addition to the use of LED task lighting.
- Off-site manufacture was undertaken wherever possible in particular the main fabric of the diagrid roof which produced almost no waste.

What social economically sustainable measures were achieved?

The Living Planet Centre enables us to welcome the public, schools and youth groups, business leaders and policy makers in a way that has not been possible before. Through the WWF Experience we hope to show the threats our planet faces and the solutions we are providing as well as ways individuals can personally make a difference.

The building incorporates a public exhibition space, a learning zone, an auditorium and video conference facilities. Some of these facilities will also be available to the community to use.

Technology plays a role in enabling WWF to operate more effectively, to communicate in new ways and to influence more people. Our flexible and resilient network infrastructure provides secure connectivity to our computer networks and supports mobility both within and outside of the office. In a hot-desking, ratio working environment, workstations are used flexibly and the IT and telecoms software and systems complement our adaptable ways of working in, around and away from the Living Planet Centre.

Commuting patterns have already changed with more people taking the train to get to work. An internal lift sharing website has provided an opportunity for those who still need to drive to work to reduce the environmental impact of their commute and cut travel costs.

	<p>Why we are here To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature. wwf.org.uk</p>
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