



Sustainability, Energy & Carbon Management

# Greenhouse Gas Assessment

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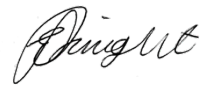
for **Hall & Wilcox**

Financial Year 2022



## Authored by

Morna McGuire^ & Emily Knight



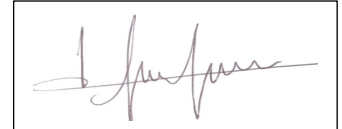
## Reviewed by

Luke Huels^



## Approved by

Julien Lacave^



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This assessment report has been prepared for Hall & Wilcox.

## Address

Hall & Wilcox, Level 18, 347 Kent Street  
Sydney 2000 NSW  
Australia

\* Registered Greenhouse and Energy Auditor

^ Climate Active Registered Consultant

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# Executive Summary

Pangolin Associates Pty Ltd (Pangolin Associates) were commissioned to conduct a comprehensive assessment of the greenhouse gas (GHG) emissions accountable to the Australian operations of Hall & Wilcox ('HW') for the Financial Year (FY) 2022.

Based on best available data, the estimated total carbon emissions for HW was 4,069.2 tonnes of carbon dioxide equivalents (tCO<sub>2</sub>-e). This total includes indirect contributions along the supply chain (scope 3 emissions).

A comparison of the individual sector contributions to GHG emissions revealed that Professional Services was the largest contributor, at 919.9 tCO<sub>2</sub>-e (22.6% of total GHG Protocol emissions). When compared to the previous year, the emissions for electricity showed the largest change in emissions at -794.1 tCO<sub>2</sub>-e (-66.9% of the total GHG emissions).

Changes to full scope GHG emissions profile for HW over time is presented below.

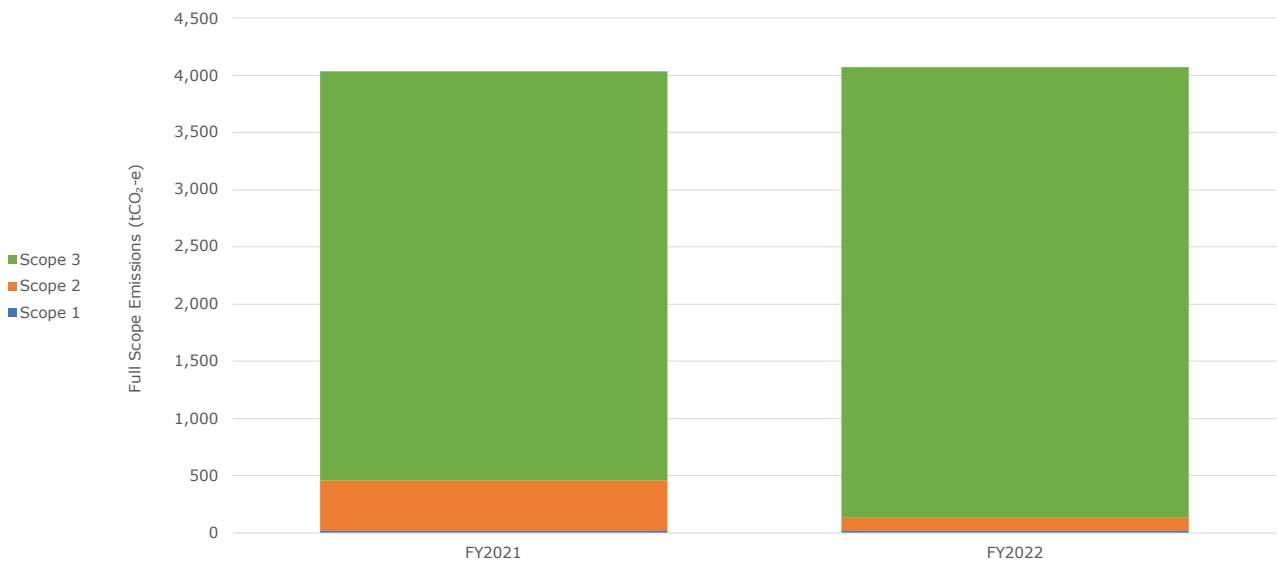


Figure I: A summary of GHG protocol emissions for HW over time.

Further comparisons of HW's GHG performance to the prior assessment is summarised below. Overall year on year (YoY) emissions changed by 32.9 tCO<sub>2</sub>-e, an increase of 0.8% over the prior year. Note that the emissions for previous years may not be directly comparable due to differences in the operational boundary over successive reporting periods.

*Table I: Primary statement of GHG emissions (tCO<sub>2</sub>-e) for HW*

Scope	Examples of Inclusions	FY2021	FY2022	Contribution to Total	Change on Previous Year	% Change on Previous Year	% Change on Previous Year Total
<b>Scope 1</b>	Direct emissions such as those resulting from fuel use or refrigerant leakage.	13.2	15.8	0.4%	2.5	19.2%	0.1%
<b>Scope 2</b>	Indirect energy import such as purchased electricity.	442.5	114.0	2.8%	-328.5	-74.2%	-8.1%
<b>Scope 3</b>	All other indirect upstream and downstream emissions resulting from activities along the value chain. Common examples include emissions associated with: the extraction, production and distribution of fuels, the transmission and distribution of electricity, base building services, business flights and other travel, staff commute to and from work, telecommunications, ICT equipment, freight, advertising and other professional services, and data services.	3,580.5	3,939.4	96.8%	358.9	10.0%	8.9%
<b>Total</b>		<b>4,036.2</b>	<b>4,069.2</b>	<b>100%</b>	<b>32.9</b>	<b>0.8%</b>	<b>0.8%</b>

The following Table and Figures provides a summary breakdown of GHG emissions by subunit and emissions category for HW.

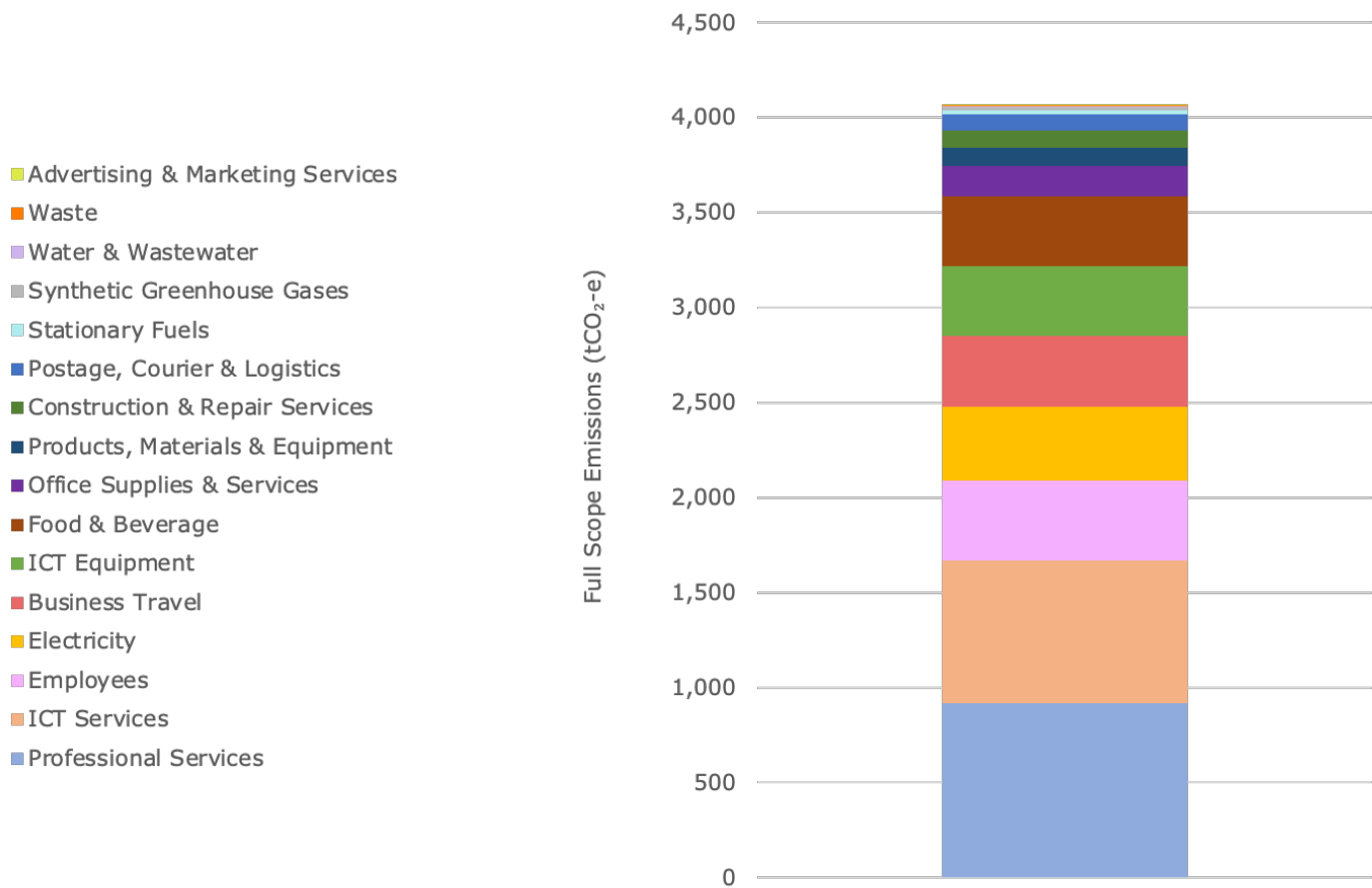


Figure II: GHG emissions for HW by emissions category





## Contact us

[www.pangolinassociates.com](http://www.pangolinassociates.com)

[info@pangolinassociates.com](mailto:info@pangolinassociates.com)

### **Sydney**

Gadigal Country  
Level 16  
175 Pitt Street  
Sydney NSW 2000

t. +61 2 8005 6300

### **Adelaide**

Kaurna Country  
Level 1  
46 Magill Road  
Norwood SA 5067

t. +61 8 7200 1030

### **Perth**

Whadjuk Country  
Suite 28  
50 St Georges Terrace  
Perth WA 6000

t. +61 8 9467 4094



### **Brisbane**

Turrbal Country  
Level 1, Suite 374  
241 Adelaide Street  
Brisbane QLD 4000

t. +61 7 3103 2000

### **Melbourne**

Bunurong & Wurundjeri  
Country  
1 Nicholson St  
East Melbourne VIC 3000

t. +61 3 9016 0023

