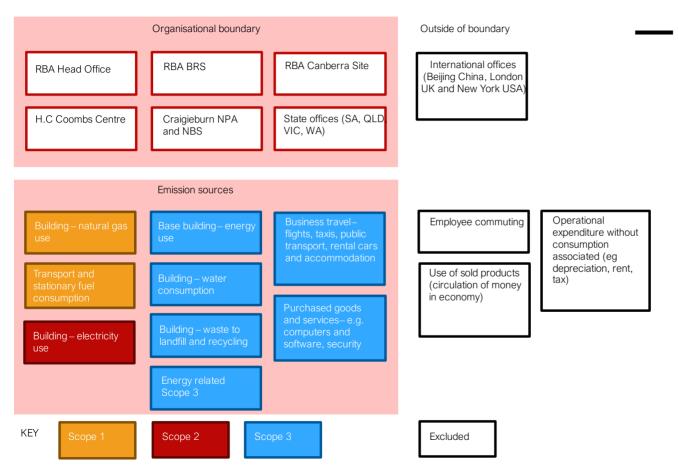


RBA emissions inventory

The Reserve Bank of Australia (RBA) has engaged Energetics to develop a scope 1, 2, and 3 emissions inventory in 2019, with updates to include FY20 & FY21 numbers in 2021, and FY22 & FY23 numbers in 2023.

This report summarises the FY22 and FY23 inventory, highlighting year-on-year changes, major insights and key areas for improvement for the RBA.





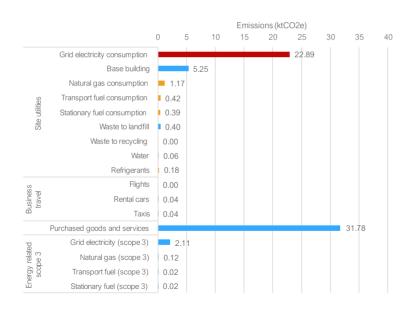
Carbon inventory boundary

Figure 1 shows the boundary of RBA's emissions inventory:

- Six buildings and four state offices (international offices not included)
- Covering all scope 1 and 2 energy consumption
- Material scope 3 emissions sources are included.

Figure 1: RBA emissions inventory

Historical emissions summary (FY20 & 21)



35 Grid electricity consumption 23.69 Base building 5.25 Natural gas consumption 1.80 Transport fuel consumption 0.29 Stationary fuel consumption 0.02 Waste to landfill 0.40 Waste to recycling 0.00 0.05 Refrigerants 0.21 0.28 Rental cars 0.02 Taxis 0.04 Purchased goods and services 37.24 Energy related scope 3 Grid electricity (scope 3) 2.18 Natural gas (scope 3) 0.19 Transport fuel (scope 3) 0.02 Stationary fuel (scope 3) 0.00

Emissions (ktCO2e)

Figure 2: FY20 Emissions inventory

Figure 3: FY21 Emissions inventory

Legend: ■ Scope 1 ■ Scope 2 ■ Scope 3

FY22 & FY23 emissions inventory summary

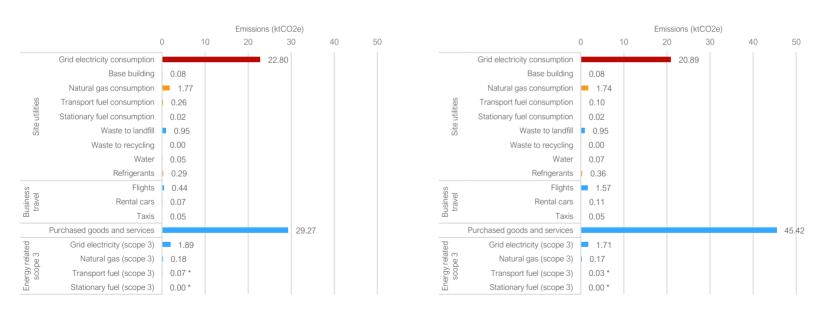


Figure 2: FY22 Emissions inventory



Figure 3: FY23 Emissions inventory

^{*} Diesel and petrol scope 3 emission factors were significantly increased in 2022 in accordance with an increase in imported petroleum products. These factors represent "well-to-pump" emissions and reflect the changing mix of domestic vs. international production of refined petroleum products used in Australia. This change has caused an immaterial increase in RBA's fuel-related scope 3 emissions relative to FY20 and FY21. For more information, refer to p43 of the National Greenhouse Accounts Factors 2022.

Some key observations

FY22 and FY23 are both record years for the RBA's emissions

Total emissions in FY22 were the lowest since FY19 when the inventory was first developed. Emissions in FY23 were the highest. This is mainly due to the refurbishment project at the Head Office (65 Martin Place)

Scope 2 emissions are decreasing, office electricity consumption is increasing

Office electricity consumption in FY22 and FY23 has increased in comparison to FY21; this may be in response to employees returning to office post COVID-19. Despite this, scope 2 emissions have gone down due to grid decarbonisation.

Scope 3 emissions remain the most significant contributor, particularly purchased goods and services

Scope 3 emissions account for over 60% of RBA's total emissions inventory in FY23. Purchased goods and services contributed over 80% of the scope 3 emissions, and 52% of the total emissions. A review of RBA's procurement practices will aid in integrating ESG ambitions into purchasing decisions.

To develop a more robust emissions inventory, RBA may consider moving away from spend-based scope 3 emissions calculations, and begin engaging its key suppliers to provide their emissions details. In this way, results of integrating ESG ambitions within purchasing decisions can be accurately quantified.

High building construction spending was a significant contributor to FY23 purchased goods and services scope 3 emissions

Category	Emissions factor used	FY22 spend	Emissions (tCO ₂ e)	
Computer Software: Licse & Sup	Professional, Scientific and Technical Services	\$29,741,872	5,522	
Banknote Purchases: Overheads	Finance	\$64,325,746	3,583	
Electronic Media Expenses-FM	Printing (including the reproduction of recorded media)	\$5,773,551	2,305	
Security Guarding Cost-Contrat	Public Order and Safety	\$9,189,911	1,962	
Computer Hardware: R&M	Other Repair and Maintenance	\$5,678,526	1,423	
Other	Multiples	\$46,410,935	14,475	
Total		\$161,120,541	29,271	

Figure 4: FY22 top 5 spend categories by emissions

Category	Emissions factor used FY23 spend		Emissions (tCO ₂ e)
Work in Progress - Premises	Non-Residential Building Construction	\$54,181,941	17,605
Computer Software: Licse & Sup	Professional, Scientific and Technical Services	\$31,609,765	5,869
Electronic Media	Printing (including the reproduction of recorded media)	\$7,099,519	2,834
Transportation Fees-Unfit Ret	Road transport	\$2,249,318	2,088
Security Guarding Cost-Contrat	Public Order and Safety	\$9,518,292	2,032
Other	Multiples	\$52,499,075	14,989
Total		\$157,157,911	45,418

Figure 5: FY23 top 5 spend categories by emissions

Scope 2 emissions trend downward in the last 5 years, while scope 3 emissions increased in FY23

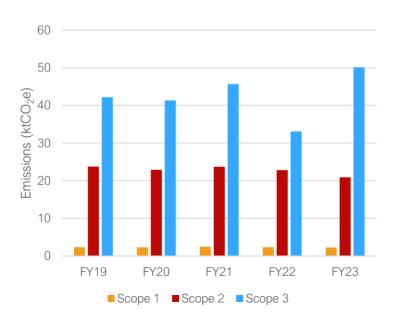


Figure 6: Year-on-year emissions comparison

Scope 3 remains the largest emissions category, accounting for 57% and 68% of RBA's total emissions in FY22 and FY23, respectively.

The increase in FY23 scope 3 emissions was mainly caused by a significant increase in construction spending, due to the refurbishment project at the Head Office at 65 Martin Place.

The reduction in FY22 scope 3 emissions was a result of lower spending in emission-intensive categories such as construction and equipment manufacturing (Plant & Equipment spending).

Emissions at Craigieburn and the Head Office decreased considerably in FY22 & FY23

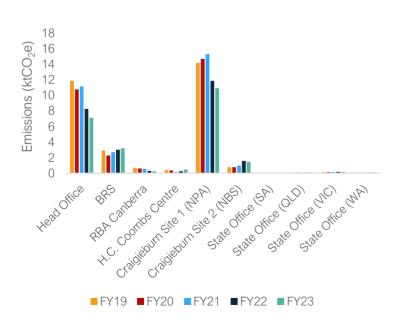
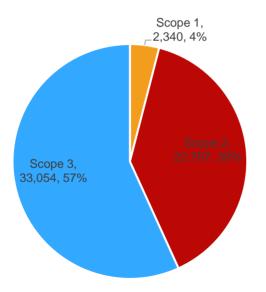


Figure 7: Site-specific emissions

RBA's Head Office in Martin Place, the Business Resumption Site (BRS), and the Craigieburn sites accounted for over 95% of RBA site-specific emissions (excluding business travel and purchased goods and services that cannot be attributed to specific facilities).

Emissions at the Head Office and Craigieburn Site 1 have reduced in FY22 and FY23. This is mainly due to reductions in the electricity grid factors, particularly in Victoria where grid emissions are higher than in other states. This is expected to continue in the future as the grid decarbonises. Grid electricity consumptions at these sites are also expected to reduce as a rooftop solar system is being installed.

Scope 2 and 3 emissions are the most significant emissions sources for the RBA



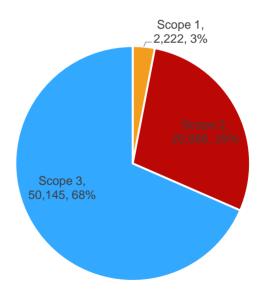


Figure 8: FY22 Emissions by scope (tCO₂e)

Figure 9: FY23 Emissions by scope (tCO₂e)

Conclusion and recommendations

Key findings:

Scope 3 is RBA's largest emissions category, in particular emissions from purchased goods and services. The number in FY23 is especially high, mainly due to high building construction spend from the refurbishment project at the Head Office at 65 Martin Place.

Scope 2 emissions are reducing due to decarbonisation of the electricity grid despite an increase in electricity consumption.

Scope 1 emissions, which are mostly from natural gas, account for about 3% of RBA's current emissions inventory. This has remained relatively stable in the last 5 years.

Next steps:

To improve its emissions inventory and environmental performance in the future, the RBA should consider:

- integrating ESG ambitions into purchasing decisions
- improving scope 3 emissions reporting by requesting emissions data from its key suppliers. This may be achieved via future contractual obligations
- identifying more initiatives to reduce energy consumption such as the solar system at Craigieburn
- entering a renewable Power Purchase Agreement (PPA) to reduce or eliminate scope 2 emissions.

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Description	Prepared by	Reviewed by	Approved by	Approval date
v1	Priya Ramakrishnan	Duc Phan David Kazmirowicz	David Kazmirowicz	02/04/2024
v2	Priya Ramakrishnan	Duc Phan David Kazmirowicz	David Kazmirowicz	23/04/2024

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FY24 carbon footprint

Energetics proposal

Letter of proposal

Dear

We are pleased to present our proposal to provide financial year (FY) 2024 carbon footprint services for the Reserve Bank of Australia (RBA). The scope of this work is detailed in Tasks 1 and 2 below.

Scope of work

Task 1: Carbon footprint update

Energetics will support the RBA in incorporating FY24 activity and emissions data into the existing carbon footprint template developed by the RBA and Energetics in 2020. The scope of this update includes:

- Updating all emissions factors. For grid electricity, historic emissions factors will be applied to
 account for grid decarbonisation over time. For all other sources, the latest emissions factors
 will be used
- Provision of an FY24 data request for sources identified in the 2022 emissions boundary (shown below):

Scope	Item
Scope 1	Natural gas, Transport/Stationary fuels, refrigerants
Scope 2	Grid electricity
Scope 3	Purchased goods and services, flights, energy related scope 3 emissions, waste, water, base building energy, rental cars, taxis

- Ongoing support during the data collection process. This includes a gap analysis on received
 data, and recommendations on alternatives or estimation methods for missing data. This does
 not include any engagement with RBA stakeholders and/or energy retailers. Four hours have
 been allowed for data collection support, assuming the majority of data will be similar to
 previous modelling. Additional support beyond this estimate may require a scope variation
- Modification of input data received from RBA into the existing carbon footprint template format (developed in 2020), where necessary
- Incorporation of FY24 data into the template.

Task 2: Presentation

A 30-minute virtual presentation of the results will be provided to RBA key stakeholders at the end of the project.

Scope exclusions

 Downstream scope 3 emissions associated with the circulation of money in the economy is excluded from the footprint

- We have not allowed for contacting electricity retailers or gas suppliers nor engaging with RBA stakeholders to collate emissions data. The data collection process is the responsibility of RBA
- We have not included any assessment of decarbonisation opportunities
- Our budget estimate assumes the inclusion of scope 1, 2 emissions relevant to RBA's Australian and international operations (Beijing, London, New York) and scope 3 emissions for the Australian operations only.

Project timeline

The proposed project timeline is shown below in Figure 1.

Tasks	Task owner	13 th May	20 th May	27 th May	3 rd June	10 th June	17 th June
Task 1: Carbon Footprint update							
Update emissions factor	EPL						
Prepare data request to gather required data in a consistent format	EPL						
Collect data to supply to Energetics	RBA						
Provide support to client during data collection	EPL						
Template modification	EPL						
FY24 data entry	EPL						
Task 2: Presentation							
Presentation to key stakeholders	EPL						

Optional

Energetics can support RBA in understanding their new emissions reporting requirements under Australia's forthcoming mandatory climate disclosure requirement via the Australian Sustainability Reporting Standards (ASRS). We can assess your current carbon footprint against the draft climate disclosure framework to identify and address any gaps and ensure that RBA is well-prepared before the implementation of the new requirements.

The draft legislation includes provisions around addressing all scopes and sources of emissions, including scope 3, with additional reporting requirements for banks and their financed emissions. Our analysis has revealed that RBA will be required to disclose under the ASRS. Energetics, with its extensive experience in energy and climate domains, is best positioned to assist RBA in evaluating its current level of emissions accounting in comparison to the forthcoming disclosure.

Pricing

We will deliver the above scope of work for a total fee of optional task).

(excluding GST and the

Please contact me with any questions about our response, or if you wish to discuss the optional ASRS disclosure support.

We look forward to your feedback.

Yours sincerely,

David Kazmirowicz | Head of Emissions Quantification

david.kazmirowicz@energetics.com.au | 0408 568 956

1.0 Document preparation

1.1 Document control

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Description	Prepared by	Reviewed by	Approved by	Approval date
V1	Josh Spencer Greta Paget	David Kazmirowicz	David Kazmirowicz	29/04/2024

1.2 Project agreement

The signatory for each party to this Agreement confirms that he or she has read this Agreement and represents and warrants that he or she is duly authorised to sign this Agreement.

Signatures

Signed on behalf of Energetics Pty Ltd by:	Full name	Date
Signed on behalf of Reserve Bank of Australia by:	Full name	Date

In lieu of your signature, your deposit or purchase order will serve as acceptance of this agreement.

Sustainability

Sustainability is core to Energetics' business. We became a 'Climate Active' certified organisation in 2019, adding our services to the certification in 2020, and in 2021 we verified our SBT through the SBTi.







Reconciliation

Endorsed by Reconciliation Australia, we are proud to have developed our *Reflect Reconciliation Action plan (RAP)*. At Energetics we envision a future where the cultures, histories, rights, and voices of First Nations peoples are heard and respected.



Information security

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