

# Terms and Conditions relating to the Calculator

**Epson Australia contracted Pangolin Associates, a well-respected energy and carbon management consultancy organisation** to verify the integrity and accuracy of the Calculator. Pangolin works with organisations Australia-wide to increase efficiencies and reduce environmental impacts. Pangolin's core services include energy audits; greenhouse gas (GHG) assessments and verifications; and compliance programs such as the National Greenhouse and Energy Reporting Scheme (NGER), the National Carbon Offset Scheme (NCOS), and the Emissions Reduction Fund (ERF). Pangolin provides carbon offsetting services including the supply of carbon credits. Pangolin's scientific team also assists clients with climate change leadership initiatives. This includes Science Based Targets (SBT) services and, and construction of environmental and energy management systems. Pangolin Associates is proud to be the first in its sector to become certified carbon neutral under the National Carbon Offset Standard (NCOS), and a founding member of B Corp. For more information please visit [www.pangolinassociates.com](http://www.pangolinassociates.com).

- This Calculator generates estimates of:
  - o the cost of energy consumption during use of a competitor printer compared to a suggested Epson printer; and
  - o based on electricity consumption only, kg of CO<sub>2</sub> generated from producing that electricity (kg of CO<sub>2</sub> per kWh)
- The estimates are to help the user to visualise savings they may be able to make based on the key assumptions set out herein but with a “weather eye” on variables some of which are mentioned (though too numerous to list exhaustively)
- The Epson business inkjet printers are designed for the business market and therefore usages and figures are in line with typical business use. The Calculator is not designed to be used by retail consumers for domestic purposes
- The Calculator reflects estimates for medium-sized businesses and kWh values are collated as at April 2020 from BLI and manufacturer's websites
- The Calculator is not designed to replace information that may be provided by a dealer or in the detailed specifications that come with any product
- The Calculator is designed as a guide only. Although Epson has used reasonable endeavours to ensure the accuracy of the data on this site at the time of publication, no representations or warranties are made as to accuracy or currency of the data. Potential customers should take steps to verify the accuracy of important data which materially affects their business and should not seek to rely on the figures provided here

- Details of the suggested Epson business inkjet printers (the “Selected Printers”) are as follows:

Product	MFP SFP	Colour Mono	A3 A4	A4 Mono Speed* (ppm)	A4 Colour Speed* (ppm)	TEC Value (kWh)
WorkForce Pro WF-C579R	MFP	Colour	A4	24	24	0.2
WorkForce Pro WF-C878R	MFP	Colour	A3	25	24	0.3
WorkForce Enterprise WF-C17590	MFP	Colour	A3	75	75	0.9
WorkForce Enterprise WF-C20590	MFP	Colour	A3	100	100	1.3
WorkForce Enterprise WF-C20600	MFP	Colour	A3	60	24	0.8
WorkForce Enterprise WF-C20750	MFP	Colour	A3	75	75	0.9
WorkForce Enterprise WF-C21000	MFP	Colour	A3	100	100	1.2

\*ISO Speed 24711/24712

- The user inputs a printer make and model and the Calculator suggests an Epson printer to compare. The Epson suggested printer will be one of the Selected Printers and, as such, there is a choice available to suggest for comparison. The Calculator determines this based on the closest available match to the comparative features of the Selected Printers above. Only those characteristics/features listed in the table above are included in the selection criteria
- The user is not bound to use the automatically generated suggested Selected Printer. The user has the option to enter a different Epson printer but must understand that the characteristics and / or features of it will differ from the printer to which user wishes to compare it and the user should note that this difference may be significant

- Power cost and Kg of CO<sub>2</sub> per kWh are estimates and will vary due to variables which include but are not limited to information provided by user

- Calculations are based on key assumptions:

- The Calculator makes use of data and models generated by third parties as detailed below
- The price for electricity is 0.225 in AUD per kWh, or 0.2273 in NZD, and is based on a medium-sized business. You are able to input your own price for a more accurate comparison
- The user's electricity prices will most likely differ from an average national price. The Calculator allows the user to edit this field for convenience to input the user's actual electricity prices
- The measure of electricity is in kWh
- The source of printer information including brand name, model number, A3/A4, single / multifunction, pages printed per minute, whether it's mono/colour is based on information obtained from Buyers Lab / Keypoint Intelligence April 2020 and published data on manufacturer's websites
- The energy consumption calculation is based on EU Energy Star method to calculate the weekly energy consumption
- Kg of CO<sub>2</sub> per kWh from electricity and heat generation values as per National Greenhouse Accounts (NGA) Factors, referenced in the table below

- Please see below for more information in respect of the Calculator regarding calculations, sources and formulae

Data	Source
Price in AUD or NZD per kWh	Based on a medium-sized business is AUD 0.225, or 0.2273 in NZD. You are able to input your own price for a more accurate comparison.
Kg of CO <sub>2</sub> per kWh (AU)	Electricity emission factor for end users as per Table 41. Latest estimate for Scope 2 (only) – for Australia (national weighted average), published by the Department of the Environment and Energy, 2018, Australian National Greenhouse Accounts, National Greenhouse Accounts (NGA) Factors. <a href="http://www.environment.gov.au/climate-change/climate-science-data/greenhouse-gas-measurement/publications/national-greenhouse-accounts-factors-july-2018">http://www.environment.gov.au/climate-change/climate-science-data/greenhouse-gas-measurement/publications/national-greenhouse-accounts-factors-july-2018</a>  The National Greenhouse Accounts (NGA) Factors has been prepared by the Department of the Environment and Energy and is designed for use by companies and individuals to estimate greenhouse gas emissions. <a href="http://www.environment.gov.au/system/files/resources/80f603e7-175b-4f97-8a9b-2d207f46594a/files/national-greenhouse-accounts-factors-july-2018.pdf">http://www.environment.gov.au/system/files/resources/80f603e7-175b-4f97-8a9b-2d207f46594a/files/national-greenhouse-accounts-factors-july-2018.pdf</a>
Kg of CO <sub>2</sub> per kWh (NZ)	Electricity emission factor for end users as per Table 9. Latest estimate of the emission factor for purchased electricity from the grid, published by the Ministry of the Environment (charged with advising the Government on policies and issues affecting the environment, in addition to the relevant environmental laws and standards). <a href="https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/2019-detailed-guide.pdf">https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/2019-detailed-guide.pdf</a>
Epson TEC value kWh	Epson Australia and New Zealand
Epson sleep values	<a href="http://www.epson.com.au">www.epson.com.au</a>
Competitor TEC and sleep values	Buyers Lab / Keypoint Intelligence April 2020 and published data on manufacturer's websites

To Calculate	Formulas
AU/NZD cost of electricity per week	multiply kWh value by TEC value of the selected printer
AU/NZD cost of electricity per year	multiply the weekly value by 52 (52 weeks in a year)
AU/NZD cost of electricity 5 years	multiply the yearly value by 5 (life of printer)
kg of CO <sub>2</sub> per week	multiply value of kg of CO <sub>2</sub> per kWh by TEC value of the selected printer
Kg of CO <sub>2</sub> per year	multiply the weekly value by 52 (52 weeks in a year)
Kg of CO <sub>2</sub> per 5 years	multiply the yearly value by 5 (life of printer)
AU/NZD cost of electricity saved p.a.	Subtract competitors AU/NZD per year to Epson's AU/NZD per year
AU/NZD cost electricity saved 5 yrs	Subtract competitors AU/NZD life of printer from Epson's AU/NZD

- In the event that the user's personal data is captured it will be processed in accordance with applicable data protection laws and regulations and the Epson's privacy policy