





Behind the meter Solar installation

Sydney, NSW

Project Profile - Live Project



Status	Value	Duration	Contract Type
 Detailed Design	 Confidential	 2 years	 D&C

Key Info

Client	Sydney Airport (FM)
Sector	Aviation
Role	Technical PM / Design Manager

Background

We provided Project Management services to deliver up to 9MW of behind the meter solar for Sydney Airport. This project supported SYD's Net Zero 2030 objectives, which were approved by the Board in May 2023.

The initial scope was:

- Identify and prioritise the most suitable locations for up to 9 megawatts of on-site solar, considering cost, installation ease, and solar array size.
- Develop financial models for procuring on-site solar, exploring various funding options such as SYD Capex, developer-funded Capex, or a combination of both.
- Provide design options that meet the requirements for detailed design and tender processes.

Starting with clean slate we identified up to 96WM of potential solar opportunity between rooftop, ground mount and carpark solar.

Working with over 15 stakeholder groups we phased stakeholder approval into 3 phases. With competing priorities from many stakeholder groups such like CASA, Air Services Australia, BOM, Planning and Design, Commercial & Leasing, Airside Operations and Facilities Management our stakeholder engagement strategy was key in delivering a successful outcome.

After 5 months of coordination and engagement 15 sites were proposed each with their own CAPEX, OPEX savings, opportunities and constraints.

It became apparent that we would need to split the project into phases in order to move forward and that trying to deliver all 9MW at once was too complex.

Working to a Phased governance process we split the project into smaller deployments which allowed the 2MW rooftop solution to proceed while further investigation continued on the ground mount airside solutions.

AMOUNT OF SOLAR (MW)	INITIALLY IDENTIFIED	AFTER STAKEHOLDER REVIEW	OPTION A	OPTION B	OPTION C
ROOFTOP	19	7	2.4 (10 No. roofs in T1)	2.4 (10 No. roofs in T1)	2.4 (10 No. roofs in T1)
CARPARK	22	20	1 (Part of Blue Emu)	6.6 (All of Blue Emu)	0
AIRSIDE: GROUND MOUNT	55	42	5.6 (Land north of Blue Emu)	0	6.6MW (Land East of 34R)
TOTAL	96	69	9MW	9MW	9MW



More Info: <https://www.caaengineering.com/blog>