

The below answer sheet is for your own self-assessment. Please keep your completed questionnaires and answers on file for your record. Sustainability Summit will send you a Refuel certificate once your questionnaire has been submitted.

## Sustainable Trends In Education Design

### 1. What key lessons have emerged from a decade of data on the Sustainable Buildings Research Centre (SBRC), and how can these insights influence future sustainable education design?

The first certified Living Building in Australia under the International Living Building Challenge™ Program The Sustainable Buildings Research Centre was designed and built to meet this high standard and began the 12-month audit process in January 2015 to achieve this certification. After successful completion, the SBRC became the first building in Australia to become certified.

### 2. What specific sustainable design features of the SBRC have proven most effective in reducing environmental impact, and how can these be replicated in other educational buildings?

- Net-zero energy: Generates more power than used.
- Water exporter: Harvests and distributes excess water.
- Natural ventilation: Uses passive conditioning (e.g., ground source heating, solar walls).
- Smart grid: Tests multiple renewable energy sources and storage.
- Green IT management: Tracks energy and water use.
- Natural wastewater system: Separates and treats greywater for nearby use.
- Sustainable IT: Holistic Green IT approach.
- Urban agriculture: Includes permaculture and native food gardens.

### 3. How has the SBRC integrated sustainability into its daily operations and maintenance, and what role does ongoing data collection play in optimizing these practices?

The Sustainable Buildings Research Centre is a multidisciplinary facility that hosts a wide range of research and industry collaborations to address the challenges of making buildings sustainable. It is pioneering new approaches to building design, construction and retrofitting techniques to create more effective places to live and work.

### 4. What challenges were encountered during the design and construction of the SBRC, and how can these experiences guide the development of more sustainable educational infrastructure in the future?

The SBRC is creating a Sustainability Street with space for up to seven buildings of various characteristics, functions and themes, where individual companies or consortia can build their demonstration high-performance buildings. The SBRC will offer full testing and evaluation services of the construction and ongoing building operations.