



**SUSTAINABLE ENERGY DEVELOPMENT AUTHORITY (SEDA) MALAYSIA**

**SEDA INNOVATION CHALLENGE (SIC) 2026**

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## **1. GENERAL RULES**

- 1.1 The competition is open to **youths aged 18 to 30 years**.
- 1.2 Participation is open to IPTA/IPTS students who are currently enrolled in **Diploma, Pre-University (Pre-U), Undergraduate, or Postgraduate** programmes and are registered under the Ministry of Higher Education (MOHE).
- 1.3 International students residing in Malaysia are eligible, subject to proof of full-time enrolment at a Malaysian higher education institution.
- 1.4 All team members must be from the **same institution**, provided they meet the eligibility criteria.
- 1.5 Each team may consist of a **maximum of four (4) members**.
- 1.6 Each team must include **at least one (1) female member**.
- 1.7 Each team must appoint **one (1) Team Leader, who must be a Malaysian citizen**.
- 1.8 Each team may participate in **only one (1) category**, as follows:
  - **Category A: Innovate the Future**
  - **Category B: Build the Future**
- 1.9 Each team is required to select **one (1) innovation scope** and subsequently choose **one (1) specific sub-scope** within the selected scope. The chosen sub-scope is not limited to the examples provided, as long as it clearly aligns with the selected scope.

## **2. SCOPE OF CHALLENGE**

2.1 Teams are required to select **one (1) innovation scope** from the six (6) scopes listed below.

The sub-scopes provided are examples only and are not limited. Teams may propose other innovative sub-scopes, provided they clearly align with the selected main scope.

### **1. Future Renewable Energy Concepts**

- Next-generation solar, wind, hydro or geothermal concepts
- Breakthrough ideas for new renewable energy materials or technology

### **2. Circular Economy & Sustainable Resource Innovation**

- Waste-to-Energy & Resource Recovery
- Battery Recycling & Life-Cycle Optimization
- Design for Circularity

### **3. Energy Access & Humanitarian Solutions**

- Renewable energy technologies for disaster relief and emergency response
- Affordable and accessible energy solutions for low-income or remote communities

### **4. Urban & Built Environment Solutions**

- Energy-efficient campus or institutional initiatives
- Urban planning models that integrate renewable energy systems
- Net-zero building concepts and sustainable architectural innovations

### **5. Food–Water–Energy Nexus**

- Agrivoltaics and dual land-use concepts
- Solar-powered or renewable-powered agricultural systems
- Renewable-driven water purification, desalination, or treatment systems

### **6. Digital Intelligence & Smart Technologies for Renewable Energy**

- Digital twins, GIS-based analysis, simulation, and modelling tools
- Artificial intelligence and advanced data analytics applications
- IoT, smart sensors, and intelligent monitoring technologies

*\*Teams are encouraged to explore innovative approaches beyond the examples listed, as long as the proposed solution remains relevant to the selected main scope.*

### **3. CATEGORY DESCRIPTIONS**

#### **3.1 CATEGORY A: IDEATION – (Innovate the Future)**

Category A is intended for early-stage ideas and conceptual innovations that propose novel, forward-looking solutions related to sustainable energy. Physical prototypes are not required for this category.

Teams competing under Category A are expected to deliver:

1. A clearly defined problem statement related to sustainable energy or the selected challenge scope.
2. An innovative concept or solution that demonstrates originality, creativity, and future potential.
3. Conceptual designs, such as:
  - Sketches
  - Diagrams
  - System flowcharts
  - Digital mock-ups or illustrations
4. A clear explanation of:
  - How the idea works
  - The intended users or beneficiaries
  - The expected environmental, social, or economic impact
5. A high-level implementation plan, including:
  - Key components or technologies
  - Potential scalability and future development
6. A compelling project poster that communicates the idea effectively during the exhibition.

*\*Category A focuses on idea quality, innovation potential, and clarity of concept, rather than technical completeness.*

### **3.2 CATEGORY B: PROTOTYPE - (Build the Future)**

Category B is designed for more advanced and developed innovations where the idea has progressed beyond concept stage and is demonstrated through a functional prototype.

Teams competing under Category B are expected to deliver:

1. A working or demonstrable prototype (physical or hardware-based), which represents the core functionality of the proposed solution.
2. Evidence of technical feasibility, such as:
  - System architecture
  - Operating principles
  - Performance indicators (where applicable)
3. Clear documentation explaining:
  - Design process and development stages
  - Materials, components, or technologies used
4. Demonstrated problem–solution alignment, showing how the prototype addresses the identified challenge.
5. Consideration of:
  - Safety and usability
  - Potential for real-world application
  - Scalability or future improvement
6. A project poster and live demonstration during the exhibition and pitching session.

*\*Category B emphasizes functionality, practicality, and readiness level, in addition to innovation and impact.*

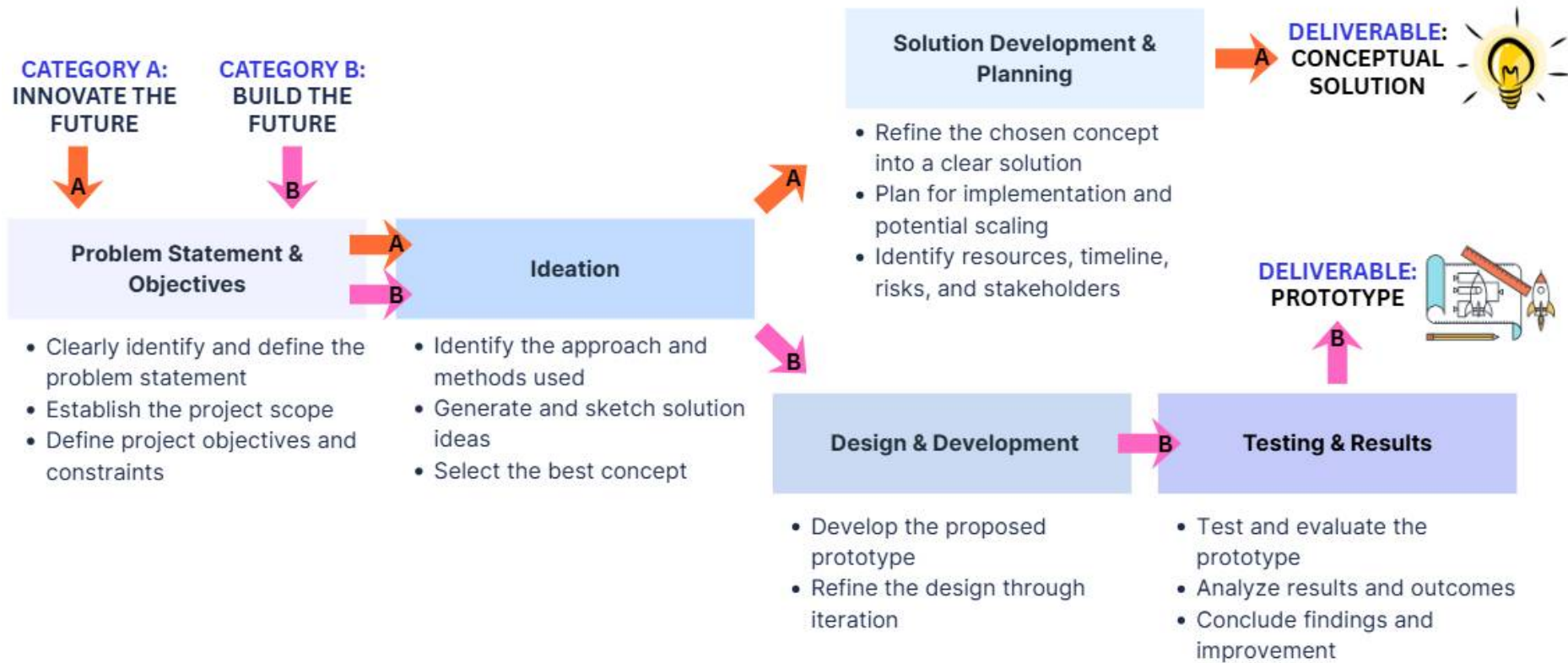


Figure 1 shows the innovation pathway from problem identification to final deliverables, highlighting the differences between Category A (Ideation – Innovate the Future) and Category B (Prototype – Build the Future)

#### **4. COMPETITION TIMELINE**

- 4.1 The table below shows the competition timeline and important dates of the SEDA Innovation Challenge (SIC) 2026. Participants are advised to plan their submissions accordingly.

ACTIVITIES	DATE
Registration	30 December 2025 – 31 March 2026
Stage 1 - Video Submission	20 April 2026 – 26 April 2026
Stage 2 - Document Submission	15 June 2026 – 21 June 2026
Final - Exhibition	12 August 2026

*\* **Only shortlisted teams** will advance to the next stage.*

*\*\* All dates are subject to change at the discretion of the organizer. Any updates will be communicated through official channels and published on the official website at <https://www.seda.gov.my/seda-innovation-challenge/>*



## **5. COMPETITION STAGES AND SUBMISSION REQUIREMENT**

### **5.1 FIRST STAGE - VIDEO SUBMISSION**

1. Each team must submit a video pitch with a maximum duration of 3 minutes.
2. The video must clearly present:
  - Project Concept – a brief explanation of the idea
  - Project Purpose – the problem being addressed or the goal of the project
  - Technical Features – explain of key technical aspects
  - Project Impact – potential benefits or outcomes
  - Sketch Design Visualization – visual representations of the design (sketches, diagrams or mockups, etc.)
  - Highlight the examples of the innovation in real-world application
3. Video must be uploaded to YouTube (Unlisted).
4. Submission of the YouTube link must be made via Google Form. *The submission link will be provided at a later date.*
5. Only one video submission per team is allowed.
6. Videos must be presented in Malay or English only.
7. At this stage, teams only need to submit their idea. They do not need to decide whether they will compete in Category A (Ideation) or Category B (Prototype) until Stage 2.
8. Only shortlisted teams will advance to the second stage.

### **5.2 SECOND STAGE - DOCUMENTATION SUBMISSION**

1. Shortlisted teams must submit the full project documentation.
2. The documentation must include:
  - Executive summary
  - Background/Motivation
  - Development/Implementation
  - Result/ Output/ Outcome
  - Picture of the innovation
3. All documentation must be submitted via Google Form. *The submission link will be provided at a later date.*

4. At this stage, teams must decide whether they want to compete in Category A (Ideation) or Category B (Prototype).
5. The top five (5) from each category will advance to the final stage.

### **5.3 FINAL STAGE - EXHIBITION & PITCHING**

1. Finalist teams will present their projects at the ISES 2026 Exhibition.
2. Submission requirements:
  - CATEGORY A: IDEATION
    - Project poster
  - CATEGORY B: PROTOTYPE
    - Project poster
    - Prototype
3. Presentation format:
  - Presentation duration: 3 minutes per team
  - Q&A session: 2 minutes following each presentation
4. Winners will be announced during the Award Ceremony at ISES 2026

## **6. OTHER SUB-COMPETITION**

In addition to the main competition, the following sub-competitions are offered and are held only during the final stage at the ISES 2026 Exhibition: Best Video Award, Best Poster Award and Best Presenter Award.

### **6.1 Best Video Award**

- Teams interested in competing for the **Best Video Award** must submit a video.
- Teams may choose to:
  1. Use the **video submitted during the first stage**, or
  2. **Submit an upgraded/new video** before the final stage.
- Teams who do not submit a new video will have their **first-stage video evaluated** for the award.

### **6.2 Best Poster Award**

- Poster Submission Requirements:
  - Poster must be submitted to SEDA during the second stage for printing and exhibition
  - Recommended dimensions: A1 size (594mm x 841mm) or vertical orientation
- Poster must include:
  - Project title and team name
  - Innovation scope and focus area
  - Key problem statement
  - Brief concept and idea
  - Expected impact/outcome
- Use high-resolution images and readable fonts

### **6.3 Best Presenter Award**

- The Best Presenter Award evaluates:
  - Communication skills
  - Presentation delivery
  - Ability to explain the project effectively

## 7. TERMS AND CONDITIONS

7.1 By participating, teams grant SEDA Malaysia the right to use their submitted materials (video, documentation, images) for promotional, education and internal purposes (without additional compensation).

7.2 Submissions must be original and not violate copyright. Previously developed projects are allowed **only if they include significant improvements or enhancements**. Plagiarism or misrepresentation will lead to disqualification.

7.3 Submissions must not include confidential or proprietary information that cannot be shared publicly, unless approved by SEDA Malaysia.

7.4 If selected as winner, teams must assign or grant to SEDA Malaysia a non-exclusive, royalty-free right to reproduce, display, distribute or otherwise use the work for non-commercial, educational, promotional purposes.

7.5 SEDA Malaysia reserves the right to amend, postpone or cancel the challenge or any part thereof, and to vary these Terms & Conditions. Any such changes will be notified to registered teams.

7.6 Decisions of the judging panel are final and binding; no correspondence will be entered into.

7.7 Teams must ensure all members comply with registration, submission deadlines, and presentation/demonstration requirements; failure may result in disqualification.

7.8 SEDA Malaysia is not responsible for any loss, damage or costs incurred by participants in connection with this challenge.

7.9 Teams are responsible for their own travel, logistics, insurance etc. unless otherwise stated.