YOUTH CLIMATHON

INNOVATIVE SOLUTIONS FOR THE ACCELERATION OF CLIMATE ACTION IN ASIA & THE PACIFIC

Team Eco-Vision

EcoWork
One-stop Jobs, Certification & Upskilling Platform for EcoWorkers
Persona

“Endangered Livelihood: A Case Study

Background:

- Name: Arifin
- Age: 32
- Occupation: Coal Miner
- Industry: Mining
- Education: Bachelor’s in Engineering
- Experience: 8 years in current role

Challenges:

- Government regulations mandate the transition to renewable energy which results in the imminent closure of the coal mine.
- Arifin faces the challenge of finding a new job, yet his experience in coal mining makes it difficult to secure employment elsewhere in the industry, given that all coal mines will eventually be closed down.

Credits: Xinhua News Agency

“I aspire to enter the green energy industry but face challenges due to limited opportunities and the need for essential training. The closure of coal mines has left me uncertain about my future, and I’m eager to explore paths aligning with the increasing focus on renewable energy.” – Arifin, Coal Miner in Indonesia, 32 years old
Problem Statement

Job obsolescence due to the transition to renewable energy - estimated **83 million jobs lost by 2027** (2% of current employment) *WEF Future of Jobs Report 2023*

**Insufficient infrastructure & facilities in the training and creation of green jobs hinder the smooth transition to cleaner energy in South-East Asia & other developing nations**

- Integration of new technologies require workers to acquire additional skills & knowledge
- Absence of standardised training and certification for green skills - essential to securing job opportunities within the green industry
Our Solution - EcoWork

South-East Asia’s pioneering online platform catered to upskilling workers in industries vulnerable to job losses & helping them source for sustainable jobs

**Becoming the Udemy for EcoWorkers in Southeast Asia**

- Provides personalised skills assessments & tangible Green Skills Certifications accredited by reputable organisations
- Career Navigation Resources with Jobs Matching algorithms - connecting companies with certified EcoWorkers
- Customised learning paths & interactive modules
- Community and networking resources - creating a supportive community of EcoWorkers, helping each other navigate their career transition
- Targets the general population of employable age (est ~20-55 years old)

EcoWorkers are individuals who, through upskilling, acquire green skills, enabling them to contribute effectively to the environmentally sustainable practices within the green industry.
Empowering Renewable Energy
EcoWorkers form the backbone HR support system for renewable energy organisations & green economy.

Resource efficiency
Educated and prepared EcoWorkers lead the way towards a less wasteful, resource-efficient and environmentally friendly way of living. **Immeasurable CO₂ Emissions saved.**

No polluting unrest & upheaval from the green transition
Fully trained and prepared EcoWorkers are ready to make a living in the new green economy.
Social Impact

18 million green jobs needing training/certification in USA alone (University of Pennsylvania, 2020)

6.3 million coal mining jobs potentially lost globally. These workers need upskilling and better sustainable jobs. (World Energy Employment Report, IEA, 2022)

2 percent of total working hours per year, equivalent to 80 million jobs may be lost each year owing to global warming and heat stress by 2030 (ILO, 2019)

2,400 billion USD may be lost globally if no actions are taken (SDG Action, 2022)

50% of the current global employees need to be reskilled (World Economic Forum, 2023)

44% of McKinsey’s Global Survey respondents say their organizations will face skill gaps within the next five years (McKinsey, 2020)
### EcoWork Training Curriculum: Green Skills for a Sustainable Future (Energy Sector)

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
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<tbody>
<tr>
<td>Module 1: Introduction to Clean Energy</td>
<td>● Overview of the clean energy sector and its various components.</td>
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<tr>
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<td>● Understanding the economic and environmental benefits of transitioning</td>
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<td>from coal.</td>
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<td>Module 2: Renewable Energy Basics</td>
<td>● In-depth exploration of solar, wind, hydropower, and other type of</td>
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<td>renewable technologies.</td>
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<td></td>
<td>● Practical training in the operation and maintenance of renewable energy</td>
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<td></td>
<td>systems.</td>
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<tr>
<td>Module 3: Green Technologies in Mining</td>
<td>● Adapting mining skills to the clean energy sector.</td>
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<td>● Training on technologies used in sustainable mining practices.</td>
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<tr>
<td>Module 4: Safety in the Clean Energy Sector</td>
<td>● Adapting safety protocols from coal mining to clean energy projects.</td>
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<tr>
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<td>● Understanding the unique safety considerations in the renewable energy</td>
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</table>
| Module 5: Environmental Impact Assessment | • Skills in assessing and mitigating environmental impact.  
• Understanding the principles of sustainable resource extraction in the context of clean energy. |
|------------------------------------------|------------------------------------------------------------------------------------------|
| Module 6: Transitioning to Energy Efficiency | • Acquiring skills in energy-efficient technologies.  
• Retrofitting and upgrading skills for a focus on energy efficiency. |
| Module 7: Soft Skills for the Clean Energy Workforce | • Developing effective communication and collaboration skills.  
• Building leadership and teamwork capabilities in the context of clean energy projects. |
| Module 9: Clean Energy Policy and Regulation | • Understanding clean energy policies and regulations.  
• Adapting to compliance requirements and ethical considerations in the clean energy sector. |
| Module 10: Job Search and Career Transition Strategies | • Crafting a resume highlighting transferable skills.  
• Interview preparation for transitioning to the clean energy workforce. |
Capstone Project: Implementing Clean Energy Practices

- Applying acquired skills to design and implement a clean energy project.
- Showcasing proficiency in a final capstone project.

Certification and Industry Integration

- Receive a certification upon successful completion of the program.
- Integration into the clean energy industry through networking opportunities and connections with EcoWork’s partnering organizations.
**Cost Considerations**

**Initial Investment (CAPEX):**
Prototype Web Portal (programming): ~$10,000 for Professionals + Pro-bono help from volunteer recruits & university students
Development of Each Training/Course: ~$6,000 per course
Development of Each Certification Standard Program: ~$12,000 per certification standard

**Ongoing Costs (OPEX):**
Staff Costs & Training & Hiring Costs: ~$1,000 after taxes, per month per person.
Internet Service Provider: $500 per month
Server Rental for Prototype Web Portal (hardware): ~$500 per month that is adequate for ~100,000 simultaneous real-time users
Work Upkeep: ~$1000-$2000 per year for stationery and other work supplies

**Tangible ROI**
- Orderly & Just Transition towards building sustainable green economy and future.
- Online learning and globally accepted educational trainings/standards lead to wider pool of ready EcoWorkers in the emerging green economy.
- Long-term benefits of having fully trained and prepared EcoWorkers that are ready to make a living in the new green economy.
- Fully educated and prepared EcoWorkers lead the way towards a less wasteful, resource-efficient and environmentally friendly way of living.
**YOUTH CLIMATHON**

**Innovative Solutions for the Acceleration of Climate Action in Asia & the Pacific**

### Implementation Plan

**Forming support EcoSystem:**
- Finding Partners to Jointly Develop/Test online "EcoWork" platform (Phase 1).
- Networking and participating in regional green economy competitions.
- Courtesy calls with relevant organisations like the UN, UNESCAP.
- Sending proposals to Green Economy Companies.

### Phase 1

**JUNE 2024**

Establishing Relevant EcoWork Certification/Training/Standards (Phase 1)
- Working closely with industry leaders towards establishing relevant industry training gold standards for the emerging green economy.
- Finding the best ways to build local capacity through the provision of training & development for local professionals, giving priority to youth, particularly those of disadvantaged backgrounds (i.e. free remote access points for no-internet demographic).

### Phase 2

**DEC 2025**

1st Milestone: EcoWork platform goes Live After 1 Year of Focus Group Beta Trials (Phase 2)
- Priority target market is in Southeast Asia.
- Trainings/Certifications become available in English and ASEAN languages.
- Trainings/Certifications will also become available in all major dialects within the ASEAN countries.

### Phase 3

**DEC 2027**

2nd Milestone: In 3 years, EcoWork platform expands globally (Phase 3):
- Trainings/Certification become available in all national languages of all countries around the world.
- Virtual reality trainings go live globally.

### Phase 4

**DEC 2030**

3rd Milestone: By December 2030, we aim to have achieved (Phase 3-4):
- Trainings/Certifications become available in all national languages as well as dialects of all countries around the world.
- Virtual reality trainings/certifications become de-facto industry standard.

**4th Milestone: In 10 years, EcoWork becomes the Global de-facto gold standard training/certification platform**
- Worldwide value, acceptance and recognition of trainings/certification conducted on EcoWork platform.

**Note:** And on and on and on it goes from phase 1 to 4 all over again! New education standards might come, or new training or new education infrastructure invented. It is a continuous process!

**Short-Term Plan:** Actions you can start immediately.

**Medium-Term Goals (1 year):** Milestones achievable within a year.

**Long-Term Vision (5-10 years):** Long-term objectives and expected outcomes.
Partnerships

Civil Society Stakeholders
- UN organizations, i.e. UNESCAP, UNESCO
- Communities in rural areas with potential for renewable energy development projects
- Civil Society Organisations, Academia & Educational Institutions
- Youth all over the world
- International Trade Organisations
- Environmental NGOs & Advocacy Groups

Private Sector & Financial Institutions
- Businesses & Private Enterprises
- Electric Grid Operators & Energy Companies
- Renewable Energy Companies (Domestic & Foreign)
- Investors & Financial Institutions (Domestic & Foreign)
- Multilateral Development Banks (World Bank & Asia Development Bank)

Government & Regulatory Institutions
- Government of Country (Legislative & Executive Branches; Regulatory Agencies)
- Ad-Hoc Committee on Accelerating Energy Transition
- Government Ministries (Finance, Climate Change, State-owned Enterprises & Investment)
- State, Regional & Local Governments

Through provision of grant funding, intellectual resources & support in marketing

“We are all in this together!”
# Business Model Canvas

## Key Partners
- Governments
- NGOs
- Green Economy Companies

## Key Activities
- Creation & management of jobs platform (launching new features & functionalities)

## Key Resources
- Seed Funding
- Human Capital

## Value Proposition
- Tangible & relevant skills
- Widely-recognised certifications

## Customer Segments
- Vulnerable communities
- Workers in jobs projected to face obsolescence

## Revenue Streams
- Grant funding opportunities & sponsorships will be prioritised in the 1st Phase to kickstart
- Advertisements & potential partnerships (revenue share) for the platform

## Marketing & Outreach Channels
- EcoWork Platform
- Public engagement: social media, referrals

## Key Considerations
- Keeping track of the business model’s financial sustainability while maximizing environmental and social impact will be emphasised throughout all the developmental cycles.
Team Members

Alland Dharmawan

Role: Team Leader
Education: Marketing Management, International Relations & Cooperation
Experiences:
- Special Staff in Economics & Energy, Presidential Advisory Council of Indonesia
- PA to the Ambassador, Indonesian Embassy in the Republic of Korea

Dylan Pon

Role: Finance & Operations
Education: Business Administration & Mgmt
Experiences:
- Tech & HR Tech Startups
- Finance, Marketing & Ops
- ASEAN-Korea Youth Ambassador

Yuneng Khong

Role: Head of R&D
Education: Chemistry
Experiences:
- Scientific Officer, Department of Scientific Services, Ministry of Health
- Sultan’s Scholar
Questions?

Feel free to ask us about EcoWork!
Question!

How would underprivileged workers in rural areas access EcoWork?

- Reaching them through Local Training Centres & Mobile-Learning Units
- Provision of offline learning materials covering essential content in the curriculum
- Over time, learning materials will be more inclusive with local languages
- Community outreach through in-person Workshops & Certifications
- Using a “train-the-trainer” model, where we guide members of the community to become instructors for other locals
What if seed funding is not granted? How would EcoWork be able to operate in such a situation?

- Bootstrapping our initial operations; reaching out to youth organizations and universities for support in manpower and planning operations.
- Collaborating with international organizations and NGOs, including UN organizations.
- Approaching companies for support through their CSR initiatives.
- Exploring opportunities for government grants and subsidies.
- Collaborating with educational institutions by partnering with local schools, universities, training centers, and research institutes to utilize their training facilities.
- Reaching out to clean energy professionals who would be willing to volunteer as trainers.
Question!
How can we ensure that the workers stick to the training program and complete it?

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<td>Progress Tracking</td>
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