

BACKGROUND

Malaysia has recently pledged a 45% of its greenhouse gases (GHG) emission intensity by year 2030 (based on 2005 emission baseline). Iskandar Malaysia, through creating a Low Carbon Society, has joined the effort to achieve the goal. Iskandar Malaysia Ecolife Challenge (IMELC) is one of the many programmes that work towards realising the vision, as well as contributing to the global effort in addressing global warming.

INTRODUCTION

IMELC was started in 2013 as part of a research project funded by the Science and Technology Research Partnership for Sustainable Development (SATREPS). The main parties involved in the project are Kyoto University, Japan, Universiti Teknologi Malaysia (UTM) and Iskandar Regional Development Agency (IRDA). The implementation of IMELC is the collaboration between Iskandar Regional development Authority (IRDA), Universiti Teknologi Malaysia (UTM), Jabatan Pendidikan Negeri Johor (JPNJ) and Medini Iskandar Malaysia Sdn Bhd (MIM).

IMELC is a post-UPSR activity for all Year 6 students in all the primary schools in Iskandar Malaysia. The teachers are trained before they are given workbooks to their students. The students must complete the workbooks and school projects to reduce carbon emission through water and electricity saving as well as recycling. 15 best schools will be selected to enter the final presentation where 3 winners will be given prizes.

Through the activities in IMELC, children learn about the connection between their daily lifestyle and its effect on the environment (such as global warming). They will have the opportunity to learn ways to reduce carbon emission by making informed decision on their choices of lifestyle. Children are encouraged to share their knowledge and understanding with their family.

WORKBOOKS



TEACHER TRAINING



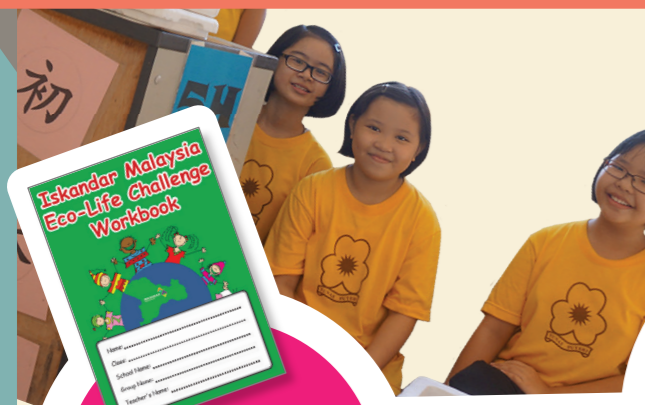
SCHOOL PROJECTS



FINAL PRESENTATION



PRIMARY SCHOOLS IN ISKANDAR MALAYSIA



2013

23 primary schools
3,790 Y6 students

2014

80 primary schools
15,623 Y6 students

2015

228 primary schools
27,628 Y6 students

2016

231 primary schools
27,125 Y6 students

12.4%
2015

8.2%
2014

7.4%
2013

CARBON REDUCTION AT ALL SCHOOLS PER MONTH
295 TON REDUCED

50k TON REDUCED IN A YEAR
CARBON REDUCTION AT ALL HOUSEHOLD IN IM

45,540 KG
RECYCLING AT SCHOOLS IN A MONTH

4.5% 2014
INCREASE OF TEACHERS' KNOWLEDGE AND AWARENESS ON LOW CARBON.

INCREASE OF STUDENTS' AWARENESS & PRACTICE ON LOW CARBON.

IMELC ACHIEVEMENTS

All the data is published and detailed out in Phang et al. (2016). Iskandar Malaysia Ecolife Challenge: Low carbon education for teachers and students. Clean Technologies & Environmental Policy, DOI 10.1007/s10098-016-1215.

Phang et al. (2016). Achieving Low Carbon Society through Primary School Ecolife Challenge in Iskandar Malaysia. Paper presented at the 2nd International Conference on Low Carbon Asia 2016.

RCE ISKANDAR

RCE (Regional Centre of Expertise on Education for Sustainable Development (ESD)) is a network of existing individuals and organisations who are actively involved in ESD of local and regional communities. Iskandar Malaysia is acknowledged by the United Nations University (UNU) as RCE Iskandar in 2014. UTM and IRDA are the joint secretariat for RCE Iskandar, and they coordinate and manage activities related to ESD in Iskandar Malaysia.

One of the projects under RCE Iskandar is IMELC. For its excellent achievements IMELC was awarded the Outstanding Flagship Project for Climate Change by the Global RCE Network in 2015. Other successful ESD activities by RCE Iskandar include Kampung Sungai Melayu Eco-tourism, FELDA Taib Andak Low Carbon Village, Rumah Iskandar Malaysia, UTM Sustainable Campus, Sustainable & Low Carbon Schools Exhibition, and Problem-Based Learning for Low Carbon Society.



TRY THIS OUT!

1kWh of electricity used emits 0.694 kgCO₂ (GreenTech Malaysia, 2014)

1m³ of water used emits 0.419 kgCO₂ (GreenTech Malaysia, 2010)

Look at your own bills or estimate the monthly usage of your electricity and water using the table below to find out how much carbon you have contributed each month!

Month:	Usage	Carbon calculation	Carbon emitted per month	Reflection: What can I do to reduce the usage?
Electricity	kWh	x 0.694	kgCO ₂	
Water	m ³	x 0.419	kgCO ₂	

COLLABORATORS



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REGIONAL CENTRE OF EXPERTISE ON EDUCATION FOR SUSTAINABLE DEVELOPMENT

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 UNITED NATIONS UNIVERSITY

ISKANDAR MALAYSIA ECOLIFE CHALLENGE



celebrating
ISKANDAR MALAYSIA
 2006 - 2016

