ICLCA & The 4th Annual Meeting of LoCARNet

Brief Introduction on
UTM-Low Carbon Asia Research Centre,
Exhibitions &
Special Issues for Low Carbon Asia

Assoc Prof Dr Lee Chew Tin, Malaysia Prof Dr Jiří Jaromír KLEMEŠ, Hungary















REGIONAL CENTRE OF EXPERTIS
ON EDUCATION FOR
SUSTAINABLE DEVELOPMENT

ACKNOWLEDGED BY





An Introduction

UTM-Low Carbon Asia Research Centre

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Director, Prof Dr Ho Chin Siong



Background

Asian Cities: Challenges and Opportunities



Being a land mass that encompasses half the humanity and is poised to double its world economy share to 52% by 2025, Asia is witnessing transformative economic growth and sociopolitical change, and putting on forever greater global economic and strategic weight.

About Us

UTM-Low Carbon Asia Research Centre



We aim to bring *innovative science and technology solutions* to the promotion of *sustainable urban futures* to the Asian region, specifically in the subject area of *climate change mitigation*.

- □ S2A of climate change mitigation and resilient development at city and regional levels
- ☐ Implementation: Advisory, Monitoring And Reporting
- ☐ Education Programme & Training Workshops
- ☐ Engagement and Empowerment of local communities (FGD)

Our Team

UTM-Low Carbon Asia Research Centre



Scenario Integration and Land Use Planning Group studies the overall vision and roadmap towards low-carbon society. The research output is to develop socio-economic scenario based on future development goals. This needs to integrate outputs from other research groups by using integrated models.



Consensus Building and Education Group examines the implementation during/after the scenario studies. Public participation or consensus building is required when the policy-makers, researchers and stakeholders discuss and make the policies and actions.



Energy System Group investigates the energy system models based on the idea of dispersed power generation system, which assesses the potential of renewable energy and supply and demand management system such as smart grid.

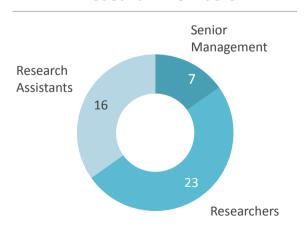


Solid Waste Management Group conducts an empirical study on waste generation, developing a model which simulates best solution for waste management in terms of 3R and GHG emission reduction.



Air Quality & Transportation Group examines assessment of co-benefit of low-carbon measures, improvement of air quality. The research output will develop a detailed transport model as road transport is one of major sources of air pollutants and is expected to grow rapidly.

Research Members



Total: 46 Members

Our Alliances

UTM-Low Carbon Asia Research Centre



Strength

Networking Sharing Synergy

Japan
China
Vietnam
Cambodia
Thailand
Indonesia
India

Our Portfolio

Iskandar Malaysia and Putrajaya







Low Carbon Iskandar Malaysia 2025

Size

221,634 hectares

Population (mil.)

1.35 (2005)

3.00 (2025)

Gross Domestic Product (bil RM)

35.7 (2005)

141.4 (2025)





Putrajaya Green City 2025

Size

4,931 hectares

Population

49,452 (2007)

347,700 (2025)

Gross Domestic Product (mil RM)

23.6 (2007)

50.3 (2025)

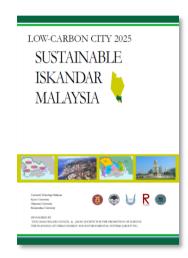
Our Portfolio

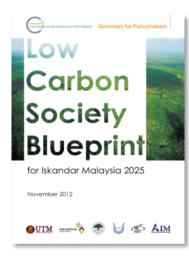
Iskandar Malaysia and Putrajaya





Low Carbon Iskandar Malaysia 2025

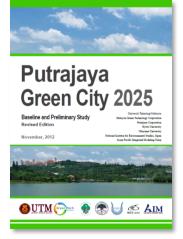


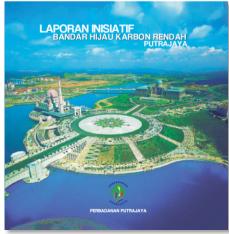






Putrajaya Green City 2025







#Currently in Progress...

S2A moves vertically...

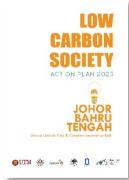




Johor Bahru

Vibrant World Class Cosmopolis of the South







Johor Bahru Tengah

Green Livable City & Creative Innovation Belt



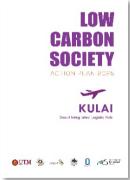




Pasir Gudang

Green & Clean Industrial Port City



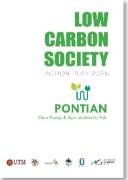




Kulaijaya

Smart Integrated Logistic
Hub







Pontian

Clean Energy and Agro-Biodiversity Hub

Poster Session and Exhibition

Poster Presentation

- 80 papers
- 10% from Asia, Need more Papers to reflect LCS Asia
- Listed in the Program Book
- More Info at: www.utm.my/locarnet
- Invitation for Full Paper Submission: 1 Nov 2015
- 2 Special Issues:
 - J Cleaner Production (JCLP)
 - Clean Technologies & Environmental Policies (CTEP)

AGENCY & INDUSTRY EXHIBITORS

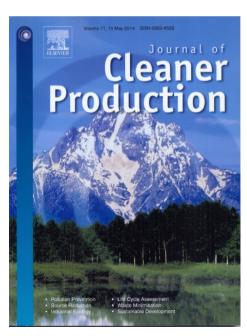
11-13 OCTOBER 2015

- 1. Majlis Bandaraya Johor Bahru (MBJB) (Johor Bahru City Council)
- Majlis Perbandaran Johor Bahru Tengah (MPJBT) (Johor Bahru Tengah Municipal Council)
- 3. Majlis Perbandaran Kulai (MPKU) (Kulai Municipal Council)
- 4. Majlis Perbandaran Pasir Gudang (MPPG) (Pasir Gudang Municipal Council)
- 5. Universiti Teknologi Malaysia (UTM), Malaysia
- 6 Iskandar Regional Development Authority (IRDA), Malaysia
- 7. Institute for Global Environmental Strategies (IGES), Japan
- 8. National Institute for Environmental Studies (NIES), Japan
- 9. Ronser Bio-Tech Berhad, Malaysia & Gait Rungkai Sdn Bhd, Malaysia
- 10. Ajiya Safety Glass Sdn Bhd, Malaysia
- 11. Kinki University, Japan
- 12. Felda Taib Andak, Kulaijaya (Low Carbon Village)
- 13. UTM Campus Sustainability

Publishing Special Issues from ICLCA & the 4th Annual Meeting of LoCARNet

Prof Dr-Habil Jiří Jaromír Klemeš

University of Pannonia, Hungary







Clean Technologies & Environmental Policy (CTEP), Springer

Prof Dr-Habil Jiří Jaromír Klemeš

- Distinguished Visiting Prof, UTM (Co-supervising 5 UTM PhD Students)
- **Head,** Centre for Process Integration & Intensification at the Research Institute of Chemical & Process Eng, *University of Pannonia, Hungary.*
- Project Director, Senior Project Officer & Hon Reader -University of Manchester (UMIST), UK
- Consultation: Process Integration, Sustainable Technologies
 & Renewable Energy. Energy saving & pollution reduction 36
 major clients
- 86 major EC, NATO and UK Know-How projects.
- > M€ 19M Research Fund
- Chair and Vice Chair of International Conference (PRES and SDEWES).
- > 280 Papers in SCOPUS
- > 300 IF (Impact Factor)
- > 4,000 Citations



Editorial Experience

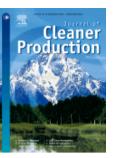
- •Executive Editor (appointed)- Journal of Cleaner Production IF 3.844
- •Editor in Chief- Chemical Engineering Transactions IF 1.03
- **CE**t
- •Executive Editor- Applied Thermal Engineering IF 2.739
- •Regional Editor Europe- *Clean Tech & Environmental Policy* (CTEP) IF 1.934

Subject Editor- *Energy* IF 4.844 **Editorial Board:**

- •Theoretical Foundations of Chemical Engineering. IF 0.36
- •Resources, Conservation & Recycling. IF 1.969
- •Revista de Chimie. IF 0.081

Special Issue Managing Guest Editor:

- 4 x Applied Energy. IF=5.613
- 2 x Computers and Chemical Engineering. IF = 2.873
- $6 \times Energy. IF = 4.844$
- 7 x Journal of Cleaner Production. IF = 3.844
- 10 x Clean Technologies and Environmental Policy. IF=1.934
- 1 x Theoretical Foundations of Chemical Engineering. IF=0.36
- 2 x Resources, Conservation & Recycling. IF = 1.969
- 3 x Heat Transfer Engineering. IF = 0.814
- 1 X Waste Management. IF = 3.220









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Management of the National State of Control of Con

■ Legislation, Policy and Regulations:

- Robust governmental policies and programmes to promote the transition to sustainable societies
- Comprehensive and Continual Support Package for the Creation of Scientific National and City-Level Climate Policies in Asia
- Smart Partnership and linkages to enable low carbon Asia (eg. PPP-Public Private Partnership)
- Effective platforms or dialogues among policy makers and academics, industry and local authorities

■ Recent Developments in Green Technologies in Asia:

- Cleaner Technologies for Waste, Water, Energy, Transportation, Air Pollution Control, Building and Construction
- Improved technologies for the integration of environmental, quality, health and safety and corporate social responsibility management
- Systemic modelling and optimization

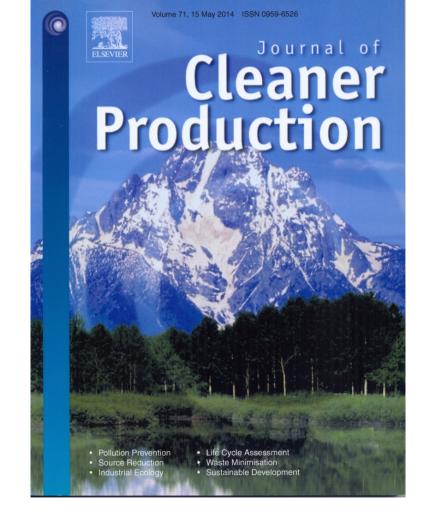
☐ Planning and Engineering Tool for Low Carbon Asia

- Life Cycle Assessment
- Regional GHG Monitoring tools (GOSAT)
- Database system for Measuring, Reporting and Verification (MRV) at local and national levels
- Mechanisms to realize the Industrial Symbioses covering planning, coordination, product design, operational, process optimization, monitoring and managerial practices

■ Knowledge Disseminations

- Improved educational & training initiatives and platforms to disseminate values, paradigms, concepts and tools to help societies make the transition to sustainable societies.
- Joint regional academic curriculum or degree in sustainable development to groom more future green scientists and leaders

- Impact Factor (2014): 3.844
- Publisher: Elsevier
- Editor-in-Chief: D. Huisingh (end of 2015)
- Some Special Issues:
 - PRES'01 (Vol. 12(2), 2004)
 - PRES 2002 (Vol. 13(5), 2005)
 - PRES'03 (Vol. 13(15), 2005)
 - PRES 2004 (Vol. 16(2), 2008)
 - PRES'09 (Vol. 18(9), 2010)
 - PRES'11 (Vol. 34, 2012)
 - PSE Asia 2013 (Vol. 71, 2014)
 - PRES 2014 (Oct 2015)
- Upcoming Special Issues:
 - PRES'15 (Oct 2016)



- ☐ Title of Special Issue:
- Bridging the Gaps for Accelerating Low Carbon Actions in Asia
- ☐ Expected Papers:
- **30**
- ☐ Guest Editors

Prof Dr Jiří Jaromír Klemeš

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Poster Available

Abstract Submission Date	1 November 2015
Text Submission Deadline	1 February 2016
Selection Confirmation	1 November 2016
Special Issue Publication	1 December 2016

Clean Technologies and Environmental Policy (CTEP)

□ Clean Technologies

- Science and engineering of technologies
- Mathematical and computerbased methods and models
- Designing, analyzing, and measuring cleanliness of products and processes
- Management of environmental systems such as ecosystems, watersheds, and manufacturing networks.
- Solutions in environmental problems arise in complex scientific, technical, economic and public policy contexts.

☐ Environmental Policy

- Scientific, social, behavioral, and economics disciplines that are relevant to complex environmental policy issues in fields of:
- Products, processes and manufacturing networks
- Wastewater collection and treatment
- Air pollution control technologies
- Hazardous toxic waste, contaminants management
- ➤ Fate and transport of contaminants in the environment
- Environmental regulations and compliance
- Pollution prevention, solid waste management

Clean Technologies and Environmental Policy (CTEP)

- ☐ Title of Special Issue:
- Mobilizing the Potentials towards Low Carbon Societies in Asia
- ☐ Expected Papers:
- **30**
- ☐ Guest Editors:

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(ctlee@utm.my)

Assoc Prof Dr Haslenda Hashim

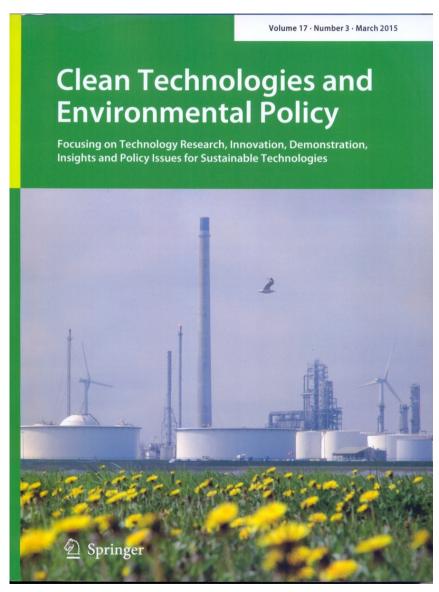
(haslenda@cheme.utm.my)

Poster Available

Submission	1 December
Date	2015
Submission	1 March
Deadline	2016
Acceptance	1 October
Deadline	2016
Special Issue Publication	1 December 2016

Clean Technologies and Environmental Policy (CTEP)

- Impact Factor (2014): 1.934
- Publisher: Springer
- Available Special Issues:
 - PRES 2014 (Oct 2015)
 - PRES'13 (Vol. 16(7), 2014)
 - PRES 2012 (Vol. 15(3), 2013)
 - PRES'11 (Vol. 14(3), 2012)
 - PRES 2010 (Vol. 13(6), 2011)
 - PRES'09 (Vol. 12(6), 2010)
 - PRES 2008 (Vol. 12(2), 2010)
 - PRES'07 (Vol. 11(1), 2009)
 - PRES 2006 (Vol. 10(2), 2008)
- Upcoming Special Issues:
 - PRES'15 (Oct 2016)
 - LoCARNet (Dec 2016)



Indicators for Journals

- **IF: Impact Factors** are published each June by Thomson Reuters via Journal Citation Reports[®]. **IF** is a number of citations for previous 2 y divided by the number of published papers in evaluated journal.
- SNIP: Source Normalised Impact per Paper measures citation impact by weighting citations based on the total number of citations in a subject field. The impact of a single citation is given higher value in subject areas where citations are less likely, and vice versa.
- SJR: SCImago Journal Rank measures influence of scholarly journals that accounts for both the number of citations received by a journal and the importance or prestige of the journals where such citations come from.

Indicator for Journals

	Journal of Cleaner Production	Clean Technologies and Environment Policy
Impact Factor	3.844	1.934
SNIP	2.364	1.122
SJR	1.588	0.652

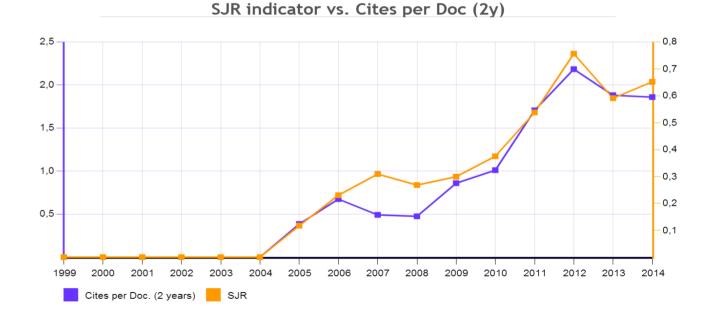
SJR vs. Cites per document

Journal of Cleaner Production

4,5 4.0 3.5 1.4 3.0 1,2 1.0 0,8 1,5 0.6 1,0 0,4 0,5 0,2 2005 2006 2007 2008 2009 Cites per Doc. (2 years) SJR

SJR indicator vs. Cites per Doc (2v)

Clean Technologies and Environment Policy



Your Contributions are Welcome

- The Special Issues will widely disseminate LoCARNet
- Each of them has circulation more than 5,000 copies
- Two different world-leading publishers have been selected
- The peer-reviewed paper are permanently presented on www.sciencedirect.com, resp. www.springerlink.com, SCOPUS, Web of Science® and Web of Knowledge®

18th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction



19th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction



PRES'17 Conference in China

The 20th Conference of Process Integration,
Modelling and Optimisation for Energy Saving and Pollution Reduction
TianJing, China
August 2017







Thank you for your attention!

Thank You Terima Kasih 谢谢 धन्यवाद ありがとう