

## CV of Han Phoumin



Han Phoumin has more than 20 years of professional experience working at various international and inter-governmental organizations and multi-disciplinary research consortiums related to energy market and technologies, environment, integrated water resource management, governance, and economic development in the region of ASEAN and EAST ASIA. Currently, he serves as a senior energy economist at the Economic Research Institute for ASEAN and East Asia. Much of his career in the past twelve years has revolved around the power sector, especially in the areas of electricity market integration, waste to energy, sustainable hydropower development, renewable energy policy research, energy efficiency and conservation, clean coal technology, energy security, gas master plan, energy demand and supply forecasting, Carbon Capture Utilisation and Storage (CCUS), and the hydrogen fuels. Dr. Han earned his PhD in economic development and policies from Kobe University, where he also specialized in applied econometrics. He also serves as guest editor for various international journal. Those included, the energy frontier, the Energy Policy journal and energy Sustainability journal and International Journal of Hydrogen Energy.

### Education

1. Doctor of Philosophy (Ph.D) specializing in economic development and policies, Kobe University, Japan (Sept 2004- Sept 2007).
2. Graduate Degree (Master of Science) specialising in “Regional and Rural Development Planning” (Asian Institute of Technology, Thailand; January, 1998- August, 1999). 2<sup>nd</sup> top GPA 3.88 in school, and with master thesis grade A.
3. Post-graduate Diploma in Environmental Science (January 1996- August 1996. The 1<sup>st</sup> time foreign program conducted by foreign teachers funded by Canada. Royal University of Phnom Penh.
4. Under-graduate degree (Bachelor of Science) specializing in ‘Agriculture and Animal Health Production’ (Royal University of Agriculture, Cambodia; 1990-95).

### *His recent edited international books and journals included:*

- Editor of the Routledge Book 2020 “Energy Sustainability and Development” .  
<https://www.taylorfrancis.com/books/edit/10.4324/9781003026075/energy->

sustainability-development-asean-east-asia-han-phoumin-farhad-taghizadeh-hesary-fukunari-kimura

- Editor of the Springer Book 2021 “Energy Sustainability and Climate Changes”. <https://link.springer.com/book/10.1007/978-981-16-2000-3>
- Editor of the Energy Policy Special Issue, December 2019, “Energy Poverty in ASEAN, India and China”. <https://www.sciencedirect.com/journal/energy-policy/special-issue/10PSJ26L58R>
- Lead co-authors of the book “Distributed Energy System in ASEAN”, ERIA publication.
- Co-authors of the series of the “Energy Outlook and Saving Potential in EAS Region”, ERIA publication.
- Co-authors of many other books included the clean use of coal; energy security; biomass coal-combustion; potential of biomass in power generation in Thailand; energy efficiency master plan in Cambodia; gas master plan in Myanmar; and many others.

***Selected journal articles publications included:***

- Suwin, S; Muiy, Y; Phoumin, H; Reza, F.A; Xunpeng, S. (2021) Assessment of accessible, clean and efficient energy systems: A statistical analysis of composite energy performance indices. *Applied Energy*, Volume 304, 15 December 2021, 117731. <https://doi.org/10.1016/j.apenergy.2021.117731>
- Ali, H.; Phoumin, H.; Weller, S.R.; Suryadi, B (2021) Cost–Benefit Analysis of HELE and Subcritical Coal-Fired Electricity Generation Technologies in Southeast Asia. *Sustainability* **2021**, 13(3), 1591; <https://doi.org/10.3390/su13031591>.
- Phoumin, H; Fukunari, K; Jun, A (2021) ASEAN’s Energy Transition towards Cleaner Energy System: Energy Modelling Scenarios and Policy Implications. *Sustainability* **2021**, 13(5), 2819; <https://doi.org/10.3390/su13052819>
- Youngho, C; Phoumin, H (2021) Harnessing Wind Potential in ASEAN: Modelling and Policy Implications. *Sustainability* **2021**, 13(8), 4279; <https://doi.org/10.3390/su13084279>
- Nepal, R.; Phoumin, H.; Khatri, A. (2021) Green Technological Development and Deployment in the Association of Southeast Asian Economies (ASEAN)—At Crossroads or Roundabout? *Sustainability* **2021**, 13 (758). <https://doi.org/10.3390/su13020758>
- Phoumin, H.; Kimura, F.; Arima, J. (2020) Potential Renewable Hydrogen from Curtailed Electricity to Decarbonize ASEAN’s Emissions: Policy Implications. *Sustainability* **2020**, 12, 10560. <https://doi.org/10.3390/su122410560>

- Phoumin, H., Kimura, F., & Sandu, S. (2020). Household-level analysis of the impacts of electricity consumption on welfare and the environment in Cambodia: Empirical evidence and policy implications. *Economic Modelling*, 89, 476-483. <https://doi.org/10.1016/j.econmod.2019.09.024>.
- Phoumin, H., Farhad T-H., & Kimura, F. (eds. 2020) *Energy Sustainability and Development in ASEAN and East Asia*. ISBN 9780367459123, Published July 13, 2020 by Routledge, 228 Pages 21 B/W Illustrations. <https://www.routledge.com/Energy-Sustainability-and-Development-in-ASEAN-and-East-Asia/Han-Taghizadeh-Hesary-Kimura/p/book/9780367459123>
- Han Phoumin, To Minh Thu, and Thim Ly (2020) *Sustainable Water Resource Development Scenarios and Water Diplomacy in the Lower Mekong Basin: Policy Implications*. ERIA Discussion Paper No. 339. Downloadable at [https://www.eria.org/uploads/media/discussion-papers/Sustainable-Water-Resource-Development-Water-Diplomacy-in-the-Lower-Mekong-Basin.pdf].
- Han Phoumin, and Fukunari Kimura (2019) The impacts of energy insecurity on household welfare in Cambodia: Empirical evidence and policy implications. *Economic Modelling* **2019**, 82 (35-41). <https://doi.org/10.1016/j.econmod.2019.09.024>
- Han Phoumin, and Fukunari Kimura (2019) Cambodia's energy poverty and its effects on social wellbeing: Empirical evidence and policy implications. *Energy Policy* **2019**, 132 (283-289). <https://doi.org/10.1016/j.enpol.2019.05.032>
- Sangeeta V. Sharma, Phoumin Han, and Vinod K. Sharma (2019) Socio-economic determinants of energy poverty amongst India households: A case study of Mumbai. *Energy Policy* **2019**, 132 (1184-1190). <https://doi.org/10.1016/j.enpol.2019.06.068>
- Dayong Zhang, Jiajia Li, and Han Phoumin (2019) Multidimensional measure of energy poverty in China and its impacts on health: An empirical study based on the China family panel studies. *Energy Policy* **2019**, 131 (72-81). <https://doi.org/10.1016/j.enpol.2019.04.037>
- Han Phoumin, Shigeru Kimura and Cecilya, Malik (2019) *Energy Outlook and Saving Potential in the East Asia Region: Main Report*. Ed (Shigeru and Han, 2019). Jakarta. ERIA. Downloadable at: <https://think-asia.org/handle/11540/9786>.
- Han, Phoumin (2016) *Analysis of Distributed Energy System and Implications for Electrification: The Case of ASEAN Member States*. ERIA Discussion Paper 2016-28. Downloadable at: [http://www.eria.org/publications/discussion\\_papers/DP2016-28.html](http://www.eria.org/publications/discussion_papers/DP2016-28.html)

- Han Phoumin (2015) Enabling Clean Coal Technologies in Emerging Asia. 2015 Summit Working Paper at Pacific Energy Summit, commissioned by The National Bureau of Asia Research (NBR). Downloadable at: <http://www.nbr.org/research/activity.aspx?id=507>.
- Han Phoumin and Venkatachalam Anbumozhi (2015) Policy Effects on Total System Energy Efficiency: Comparisons of advanced and developing economies in the EAS region. ERIA Discussion Paper 2015-67. Downloadable at: [http://www.eria.org/publications/discussion\\_papers/DP2015-67.html](http://www.eria.org/publications/discussion_papers/DP2015-67.html)
- Venkatachalam Anbumozhi and Han Phoumin (2015) Tracking Clean Energy Progress in ASEAN Member States and Analysis of Implementation Deficits. ERIA Discussion Paper 2015-87. Downloadable at: [http://www.eria.org/publications/discussion\\_papers/DP2015-87.html](http://www.eria.org/publications/discussion_papers/DP2015-87.html)
- Han Phoumin (2015) Energy Policies and Home Solar System in Cambodia. ERIA Discussion paper 2015-64. Downloadable at: [http://www.eria.org/publications/discussion\\_papers/DP2015-64.html](http://www.eria.org/publications/discussion_papers/DP2015-64.html)
- Han Phoumin and Fukunari Kimura (2014) Trade-off Relationship between Energy Intensity -- thus Energy Demand—and Income Level: Empirical Evidence and Policy Implications for ASEAN and East Asia Countries. ERIA Discussion Paper 2014-15. Downloadable at: [http://www.eria.org/publications/discussion\\_papers/trade-off-relationship-between-energy-intensity--thus-energy-demand---and-income-level-empirical-evi.html](http://www.eria.org/publications/discussion_papers/trade-off-relationship-between-energy-intensity--thus-energy-demand---and-income-level-empirical-evi.html)
- Han Phoumin and Shigeru Kimura (2014) Analysis on Price Elasticity of Price of Energy Demand in East Asia: Empirical Evidence and Policy Implications for ASEAN and East Asia. ERIA Discussion Paper 2014-05. Downloadable at: [http://www.eria.org/publications/discussion\\_papers/analysis-on-price-elasticity-of-energy-demand-in-east-asia-empirical-evidence-and-policy-implication.html](http://www.eria.org/publications/discussion_papers/analysis-on-price-elasticity-of-energy-demand-in-east-asia-empirical-evidence-and-policy-implication.html)
- Fukui, Seiichi, Miwa, Kana and Phoumin, Han (2013) Child Labour and Wealth in Rural Cambodia: Re-examination of Alternative Hypotheses, *Journal of Development and Agricultural Economics*, Vol 5, No.2. pp 35-48.
- Kana Miwa, Phoumin Han and Seiichi Fukui (2010) Does Child Labour Have a Negative Impact on Child Education and Health? A Case Study in Rural Cambodia, *Oxford Development Studies*, Vol 38, No.3. pp 357-382.
- Han Phoumin (2010) Economic Facts and Development in the Lower Mekong Basin, *State of the Basin Report, Mekong River Commission Secretariat*. Vientiane Lao PDR.
- Han Phoumin. (2009). Hours Worked and Children's Health in Rural Agriculture: Empirical Evidence for Policy Implications. *Annual Development Review, Cambodia Development Resource Institute*, 2008-2009 ADR, Chapter 8. pp. 168-187.

- Han Phoumin (2008) Human Capital and Hours Worked of Children in Cambodia: Empirical Evidence and Policy Implications. *Asian Economic Journal*, Vol 22, No.1. pp. 25-46.
- Han Phoumin and Seiichi, F. (2008) Root Causes of Child Labor in Cambodia: Testing “Luxury” hypothesis. *Journal of International Cooperation Studies*, Vol 16, No. 1. pp. 131-154.
- Han Phoumin., et.al. (2008). Testing the “Wealth Paradox” on the incidence of child labor: A Case Study in Cambodia. *Working Paper No.18, at Kobe University*. Electronic copy is available at: <http://www.research.kobe-u.ac.jp/qsics-publication/qwps/>
- Han Phoumin and Seiichi Fukui (2006). Hours Supplied of Child Labor and School Enrolment: Evidence and Policy Implication, The Case of Cambodia”. *Working Paper No.5, at Kobe University*. Electronic copy is available at: <http://www.research.kobe-u.ac.jp/qsics-publication/qwps/>
- Han Phoumin and Seiichi Fukui (2006). Child’s Wage Rate, Human Capital and Hours Worked Trade-off: Evidence and Policy Implication, The Case of Cambodia”. *Working Paper No.6, at Kobe University*. Electronic copy is available at: <http://www.research.kobe-u.ac.jp/qsics-publication/qwps/>
- Han Phoumin (2004) Goal 7: Ensure Environmental Sustainability. A Cambodian Millennium Development Goals (CMDGs), *National Publication for CMDGs 2004*.