AIM developed a 2050 net-zero scenario for Luang Prabang City

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Summary of AIM Analysis for Luang Prabang City

- **FY2020: Start conducting the AIM Analysis for Luang Prabang City (LPB)**
  - Data collection and preparation
  - 19/3/2021: The first analysis of LPB scenario was presented at the LoCARNeT 9th Annual Meeting (by Virtual Meeting)
- **FY2021:**
  - Developed the scenario using AIM/ExSS
  - 14/3/2022: The preliminary result of LPB scenario was presented at the LoCARNeT 10th Annual Meeting (by Virtual Meeting)
- **FY 2022:**
  - 19/5/2022: The low carbon scenario was presented at the Consultation Workshop on Low Carbon Development Scenario for LPB organized by LPB city and IGES (by Virtual Meeting)
  - A net zero scenario was developing in 2022
  - 17/3/2023: The net zero scenario 2050 was presented at the LoCARNet 11th Annual Meeting (by Virtual Meeting)

| Time	Description	Speakers
8:00-8:30	Registration	
8:30-9:00	Opening remarks	- Mr. Phengkham Thammavong, Deputy Director, Department of Natural Resources and Environment, Luang Prabang Province - Mr. Immala Inthaboualy, Deputy Director General, DCC - Mr. SAKOGUCHI Sadamitsu, Assistant Director, Office of Director for International Cooperation for Transition to Decarbonization and Sustainable Infrastructure Ministry of the Environment, Japan - Dr. FUJINO Junichi, Programme Director, Integrated Sustainability Centre, IGES
9:00-9:20	Background of climate change	- Mr. Ka Xaysana, Director, Climate Change Awareness Division, DCC
9:20-9:40	Climate change policies	- Mr. Suphaxay Kormanay, Climate Change Policy Division, DCC
9:40-10:00	Q and A	All
10:00-10:15	Coffee break	All
10:15-10:40	Background of LCS	- Mr. BounEua Khamphilavanh, Deputy Director, Division of GHG Inventory and Mitigation, DCC - Dr. Nguyen Thai Hoa, Fellow, IGES
10:40-11:10	Kyoto's experiences towards realizing a decarbonized city	- Mr. TERUNUMA Takeshi, Assitant Director, International Cooperation, Global Environment Policy Office, Kyoto City - Mr. KIKUTA Shoichiro, Assistant Director Project Promotion Section Kyoto City
11:10-11:50	Q and A	All
11:50-12:00	Closing remarks	

Data collection

Data	References
Base year data: Base year 2015 • Population and Household • Input Output table (or, regional economic accounting) • Transport demand (Passenger & Freight) • Building • Energy demand, energy supply	• Data Collection Survey on Regional Development in Luang Prabang, Lao P.D.R (JICA, 2016) • Country Analysis Report Lao PDR 2015 (UN, 2015) • Lao PDR Energy Statistics 2018 prepared by Ministry of Energy and Mines, Lao PDR; supported by The Economic Research Institute for ASEAN and East Asia (ERIA), 2018 • Luang Prabang city 5years Social Economic Development Plan Series VII-2020 • Laos IO table 2017
Reference for future scenarios: 2050BaU, 2050CM and 2050ZE • Population projection • Economic projection / planning • Transport planning • Energy strategy • Potential of renewable energy • etc.	• Lao PDR Energy Outlook 2020 prepared by Department of Energy Policy and Planning, Ministry of Energy and Mines, , Lao PDR; supported by Economic Research Institute for ASEAN and East Asia (ERIA), 2018 • The Energy Development Plan (2021-2025) for Luang Prabang Province • The Public Works and Transportation Development Plan (2021-2025)

Final energy consumption (Ktoe)
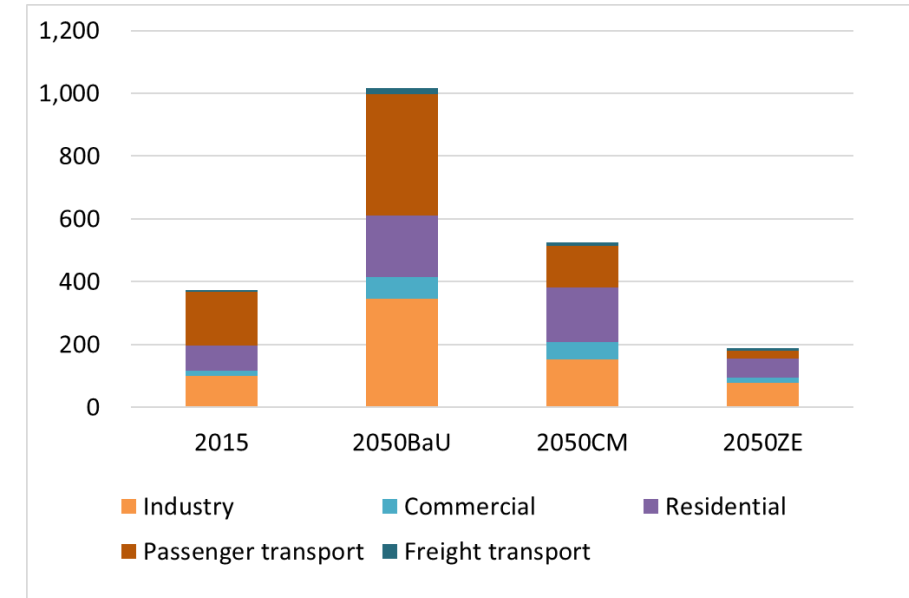
CO$_2$ emissions (KTCO$_2$)

2
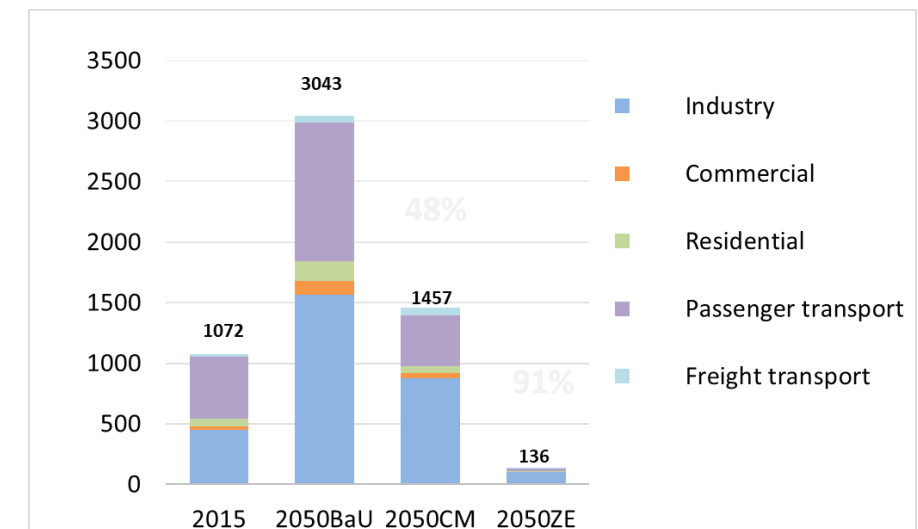
Actions towards a 2050 net zero in Luang Prabang City

Actions	Industry	Commercial	Residential	Passenger Transport	Freight Transport	**Total (ktCO2)**
Action 1. Green Industry Promotion of energy efficient equipment and fuel shift	237					**237**
Action 2. Green Building Diffusion of low-energy building (EMS, Insulation, Fuel shift)		24	59			**83**
Action 3. Green Transport Energy efficient vehicle and modal shift				107	89	**196**
Action 4. Green Power Renewable energy, reduce transmission loss	1,362	467	130	405	27	**2,391**
Total (ktCO2)	**1,599**	**491**	**189**	**512**	**116**	**2,907**

3

AIM's Contribution to Actual Implementation

- Provide scientific information and data for policymakers for taking into account integrating results of AIM analysis into development of the long-term policies/strategies ;

- Illustrate middle-term and long-term effects from AIM analysis;

- Discuss and convince policymakers/implementers;

- Seeking for city-to-city cooperation for implementing the identified actions.

- Discussion with LPB authorities on simulation results;

- Asking for more information for other sectors analysis;

- Apply other methods for economic impact analysis;