



**MINISTRY OF INDUSTRY AND TRADE**

**Department of Energy Efficiency and Sustainable Development**

# **POLICIES AND THE IMPLEMENTATION OF THE NATIONAL ENERGY EFFICIENCY PROGRAM (VNEEP) FOR THE 2019-2030 PERIOD**



**Ha Noi - 2022**



# Content



**Energy consumption in Viet Nam**



**Energy efficiency policies in Viet Nam**



**VNEEP 2019-2030**





# I. Energy consumption in Viet Nam

- GDP grew by an average of 7.26%/year in the period 2001-2010 and 5.91% in the period 2011-2015.
- Energy demand increased by about 10% in the period 2001-2010, about 7% in the period 2011-2019 while the demand for electricity increased by 13%/year in the period 2001-2010 and around 9.5% in the period 2011-2019.
- GHG emissions from the energy sector accounted for about 63% of Viet Nam's total greenhouse gas (GHG) emissions in 2010 and will account for about 73% and 80% by 2030 and 2045, respectively.
- In the future, primary energy sources will not meet the energy demand of the economy. Vietnam has imported coal for power generation and will start importing LPG from 2023.





# I. Energy consumption in Viet Nam

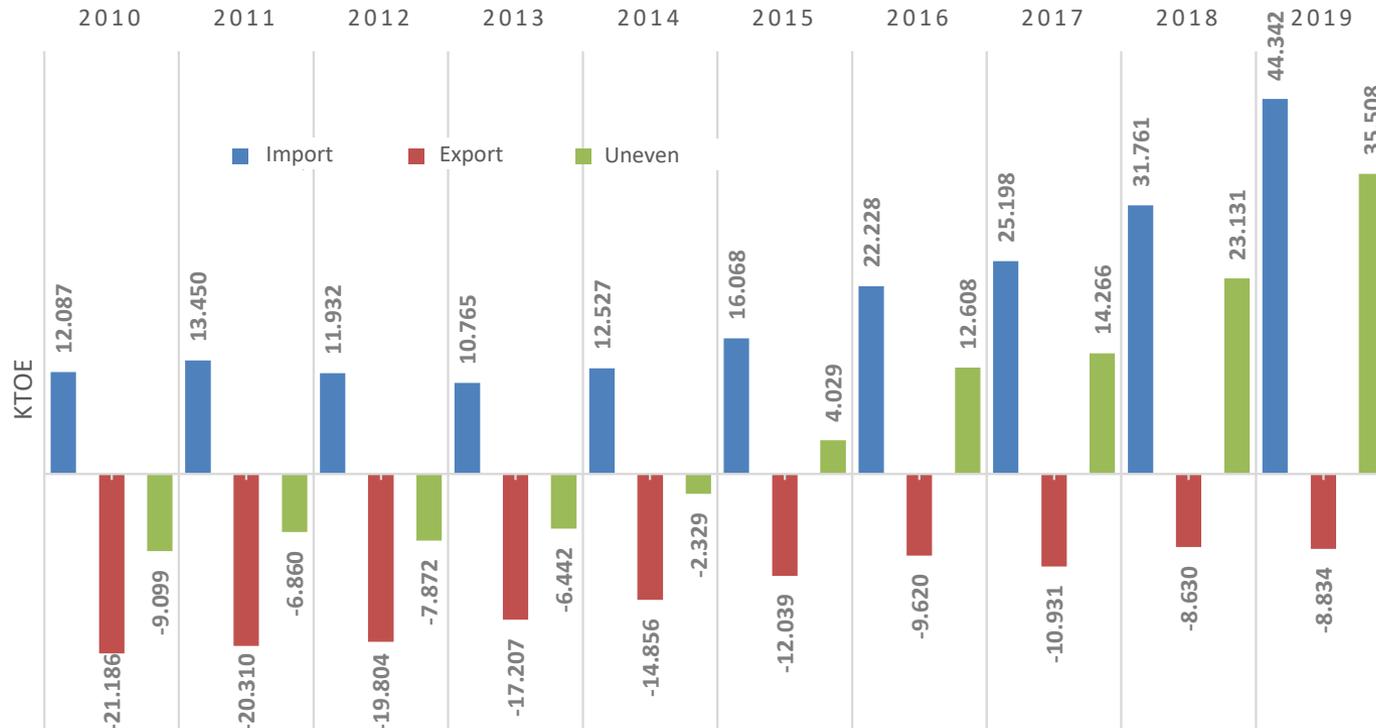
## Some Economic and Energy Indicators in Viet Nam, 2016-2020

Item	Unit	2016	2017	2018	2019	2020
Total primary energy supply	KTOE	68,825	70,909	84,140	94,495	95,762
Total final consumption	KTOE	50,460	53,432	60,457	64,542	66,014
Final consumption per capita	kgOE per capita	541	567	634	669	676
Final consumption/GDP	kgOE/ 1000USD	307	305	322	321	319
Electricity consumption per capita	kWh per capita	1,711	1,843	2,009	2,169	2,229





# I. Energy consumption in Viet Nam

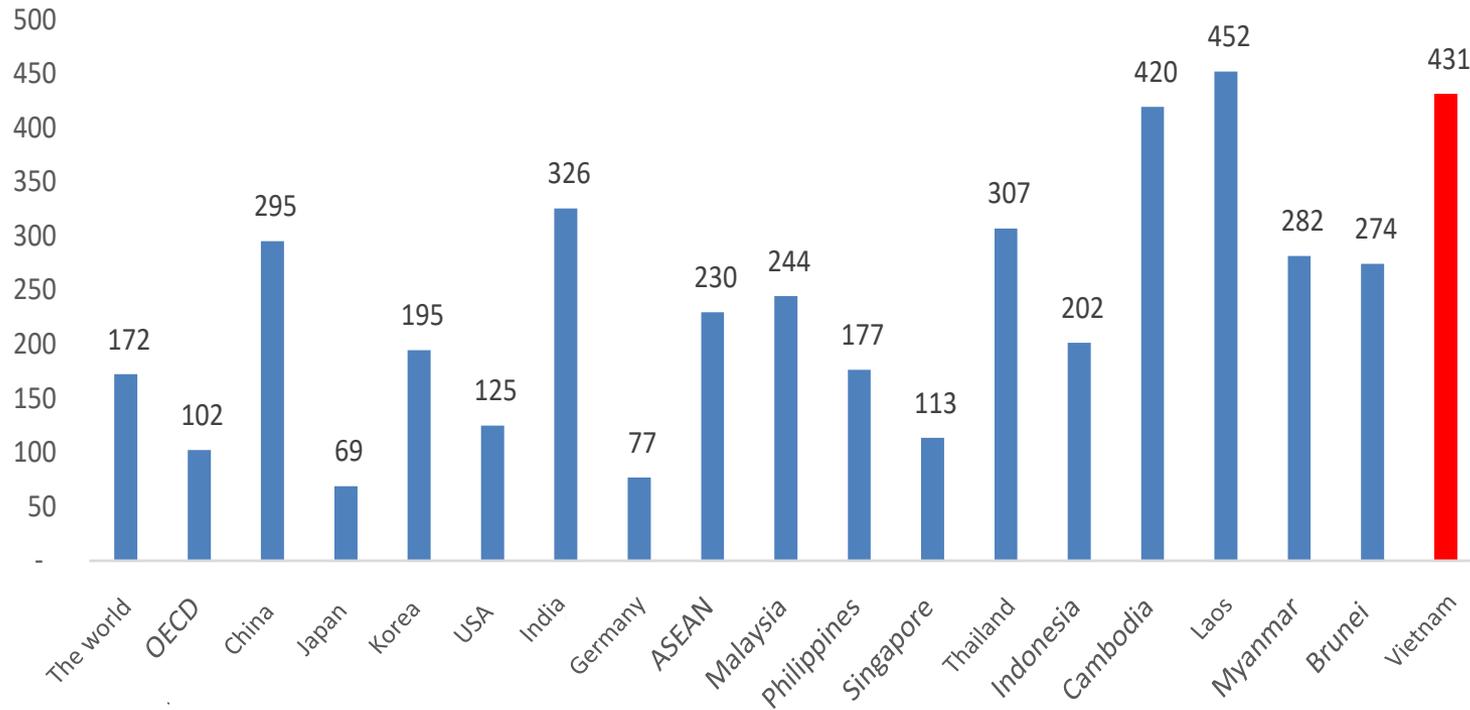


**Energy Import – Export in the period of 2010-2019, KTOE**





# I. Energy consumption in Viet Nam

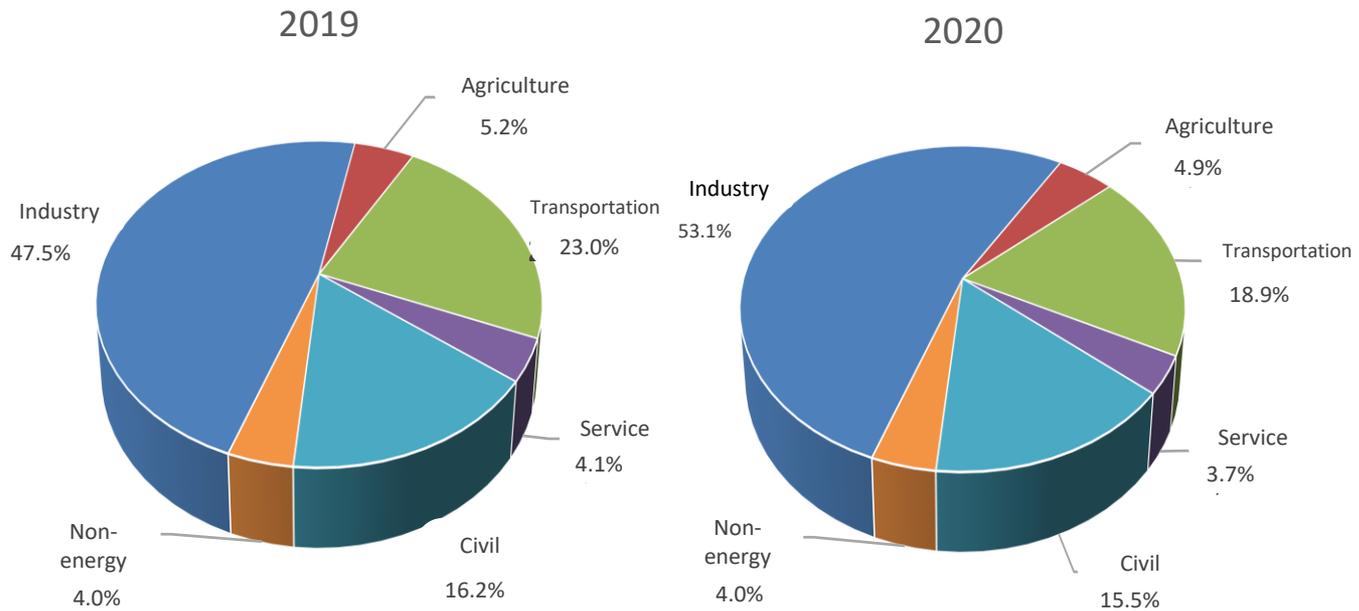


**Comparison of total primary energy supply/GDP  
(kgOE/1000USD)**





# I. Energy consumption in Viet Nam



**Final energy consumption mix by sector**





# I. Energy consumption in Viet Nam

**List of Key Energy Users 2020** (Decision No. 1881/QĐ-TTg dated 9 November 2021):

- The total number of the key energy users in 2020 in the country were 2,961:

+ A total of 2,480 industrial production facilities, 13 agricultural production facilities, and 80 transportation facilities have total energy consumption in a year equivalent to one thousand tons of oil equivalent (1000 TOE) and above;

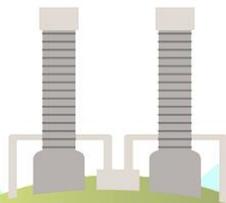
+ A total of 388 constructions used as headquarters, offices, and houses; educational, medical, entertainment, physical training and sports establishments; hotels, supermarkets, restaurants, shops have total energy consumption in a year equivalent to five hundred tons of oil equivalent (500 TOE) or more.





## II. Overview of energy efficiency policies

- Reduced energy intensity to 1-1.5% per year according to the Resolution of the 12<sup>th</sup> Party Congress.
- The Politburo's Resolution 55-NQ/TW: The energy-saving over the total final energy consumption against business-as-usual (BAU) scenario to reach 7% by 2030 and up to 14% by 2045.
- The Prime Minister's Decision No. 280/QĐ-TTg dated 13 March 2019 approving the National Energy Efficiency Program: to save 5.0 – 7.0% of the national energy consumption in the period of 2019 - 2025; to save 8-10% of the national energy consumption in the period of 2019-2030.
- According to NDC synthesis report, Viet Nam has committed to cut GHG emissions by 9% in the period 2021 - 2030 against BAU with domestic resources, and maybe by 27% with international support.



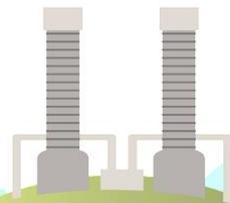


## II. Overview of energy efficiency policies



### Legal documents

- Law 50/2010/QH12 on economical and efficient use of energy dated 28 June 2010
- Decree 21/2011/ND-CP detailing the implementation measures of the Law on economical and efficient use of energy
- Decree 134/2013/ND-CP dated 17 October 2013 regulating sanctions against administrative violation in the field of electricity, safety of hydroelectric dam, energy efficiency and Decree 17/2022/ND-CP dated 31 January 2022.



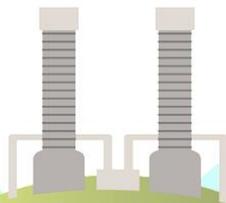


## II. Overview of energy efficiency policies



### Legal documents

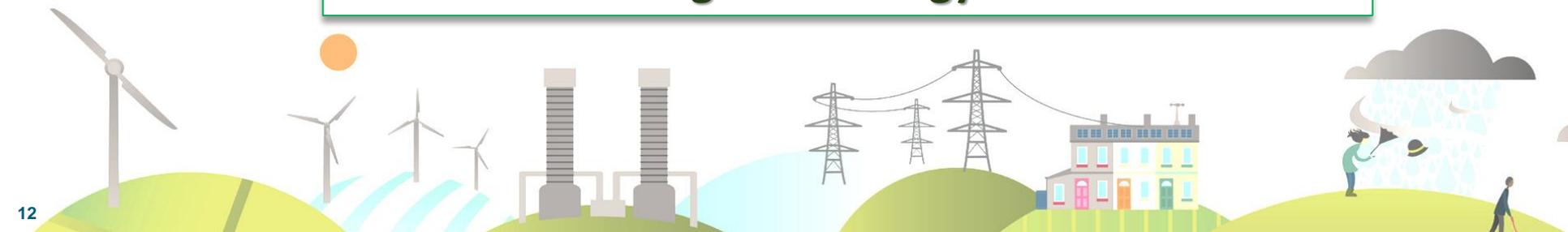
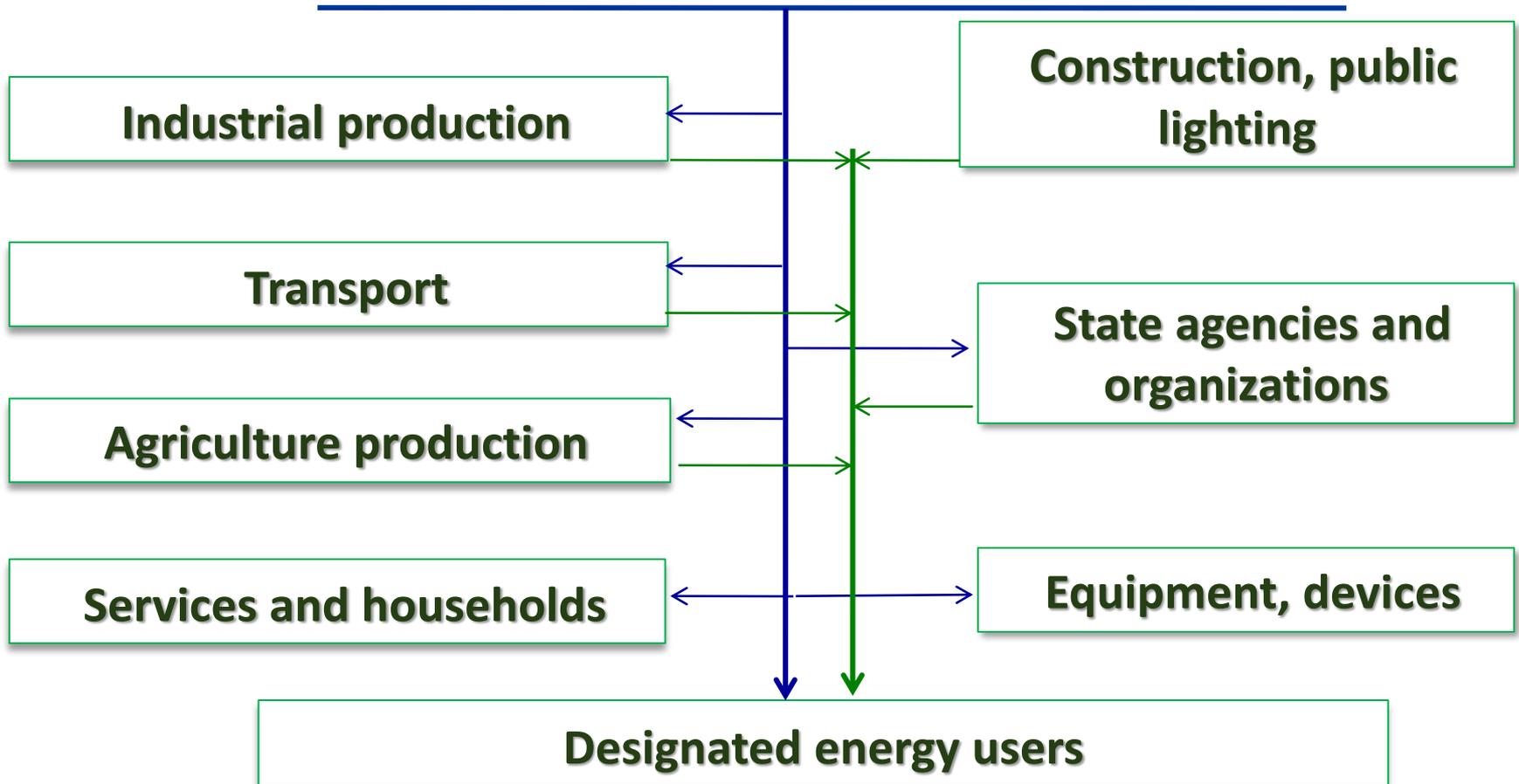
- The issued Decisions of the Prime Minister's, Circulars and regulations on economic and efficient use of energy in industry, construction, agriculture, transport sectors, etc.
- Circulars on energy consumption benchmarking in chemical, beverages, iron and steel, plastics, pulp and paper, sugar cane, seafood industries issued in the 2014-2019 period, Circular 09/2012/TT-BCT (replaced by Circular 25/2020/TT-BCT) on elaboration of plans, report on implementation of plans on economical and efficient energy use; implementation of energy audit.





# II. Overview of energy efficiency policies

## Legal documents by sector





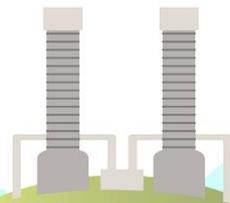
# III. VNEEP 2019-2030



## Overall objective



- Mobilize all national and international resources to promote energy efficiency through the synchronous implementation of state management resolutions, technical assistance, scientific and technological research and product development, market transformation, training and developing human resources in the field of EE.
- Creating habit of efficiency use of energy in all social activities, reducing energy intensity in industry and economics sectors; efficiency use of energy becomes a regular activity for designated energy users and key economic sectors with high consumption of energy, towards the goal of green growth and sustainable development.





# III. VNEEP 2019-2030



## Specific objectives

**2019 - 2025**

Reach the goal of saving 5-7% of total national energy consumption

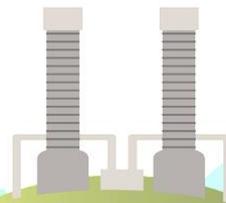
**01**



**02**

**2025 - 2030**

Reach the goal of saving 8-10% of total national energy consumption





# III. VNEEP 2019-2030



<b>Period to 2025</b>	<b>Period to 2030</b>
<ul style="list-style-type: none"><li>▪ Completing mechanisms, policies and legal regulations on energy efficiency</li><li>▪ Reduce power loss to below 6.5%</li><li>▪ Reduce average energy consumption in industries compared to period 2015-2018: Steel 3-10%, Chemical &gt;7%, Plastic 18-22.46%, Cement &gt;7.5%, Textile garment &gt;5%, Alcohol and beverage 3-6.88%, Paper 8-15.8%</li></ul>	<ul style="list-style-type: none"><li>▪ Reduce power loss to below 6%</li><li>▪ Reduce average energy consumption in industries compared to period 2015-2018: Steel 5-16.5%, Chemical 10%, Plastic 21.55-24.81%, Cement &gt;10.89%, Textile garment &gt;6.8%, Alcohol and beverage 4.6 – 8.44%, Paper 9.9-18.48%.</li></ul>

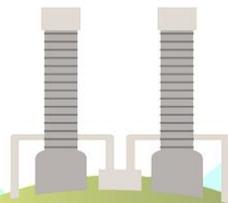




### III. VNEEP 2019-2030



<b>Period to 2025</b>	<b>Period to 2030</b>
<ul style="list-style-type: none"><li>70% of industrial zones and 50% of industrial clusters have access to and apply energy efficiency solutions</li><li>100% of designated energy users have applied the energy management system</li><li>100% of designated transport enterprises have programs to disseminate vehicle control skills and technical solutions towards energy efficiency</li><li>80 buildings certified as green building</li></ul>	<ul style="list-style-type: none"><li>90% of industrial zones and 70% of industrial clusters have access to and apply energy efficiency solutions</li><li>Reduce 5% of gasoline and oil consumption in the transport sector</li><li>150 buildings certified as green building</li><li>Energy labeling 50% of building materials that require insulation</li></ul>





# III. VNEEP 2019-2030



<b>Period to 2025</b>	<b>Period to 2030</b>
<ul style="list-style-type: none"><li>▪ Develop program to convert energy profiles market for at least 5 popular products</li><li>▪ Training and granting certificates to 3,000 energy managers / auditors</li><li>▪ 90% of provinces and centrally-run cities formulate and approve the program on energy efficiency</li><li>▪ Develop a network of energy saving units in at least 50 provinces. Build 1 Viet Nam Energy Information Center</li></ul>	<ul style="list-style-type: none"><li>▪ Training and granting certificates to 5,000 energy efficiency experts and energy auditors</li><li>▪ 100% of provinces and centrally-run cities formulate and approve Energy Efficiency Programme</li></ul>





# III. VNEEP 2019-2030

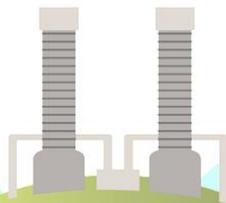


- **VNEEP 3**

To be implemented and applied throughout the country

Applied to all subjects including authorities, organizations and individuals relevant to energy efficiency in Viet Nam

Implementation time frame from 2019 to 2030, divided in two phases namely 2019-2025 and 2026-2030





# III. VNEEP 2019-2030



## Tasks under the Programme

1

To review, develop and finalize mechanisms and policies on energy efficiency

2

To provide technical and financial assistance to promote projects on investment, production and trading of EE products

3

To establish Viet Nam Energy Database Center, databases and IT applications on energy and energy efficiency

4

To enhance capacity on energy efficiency

5

To strengthen inspection, monitoring, urging and guiding the implementation and assessment of the compliance with legal regulations on energy efficiency

6

To communicate and raise public awareness about energy efficiency

7

To conduct scientific and technological studies and researches

8

To strengthen international cooperation

9

To establish Fund/Facility

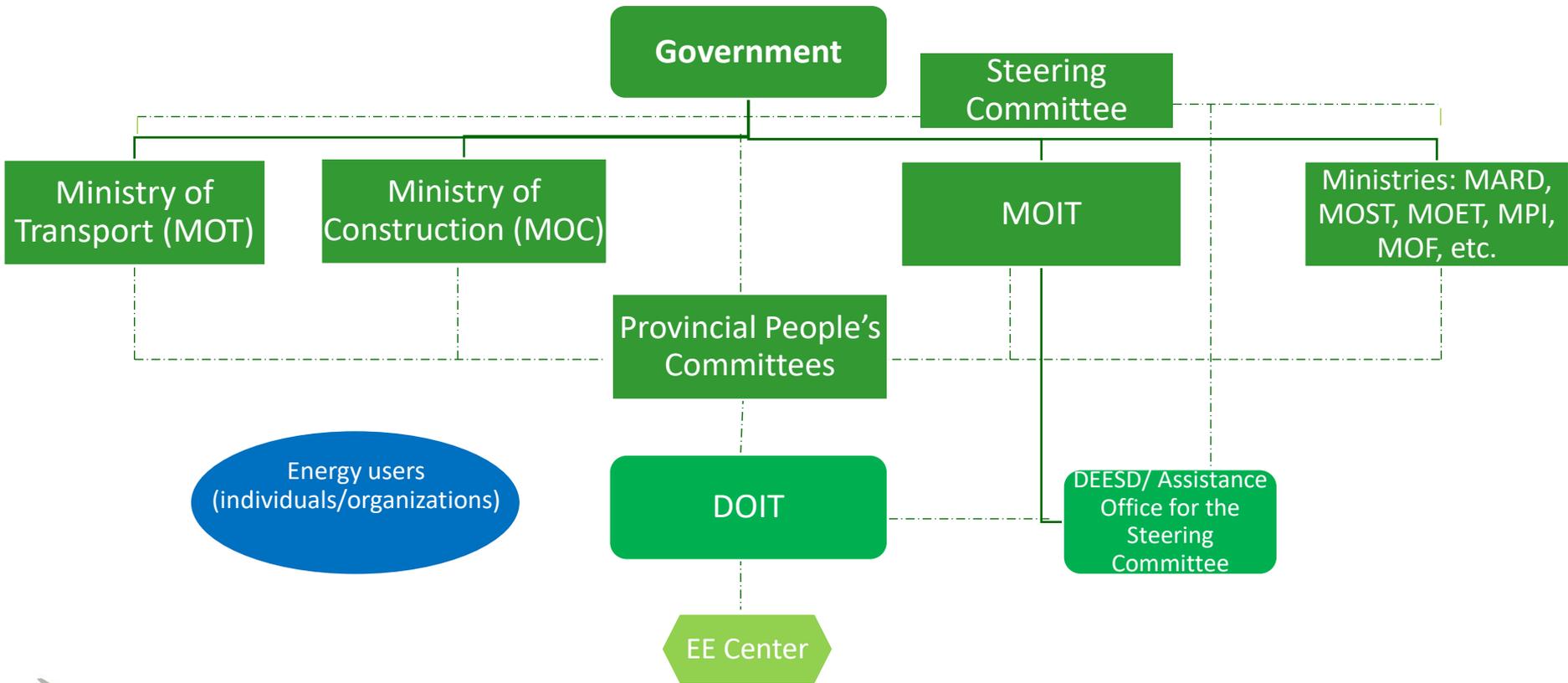




# III. VNEEP 2019-2030



## Implementation



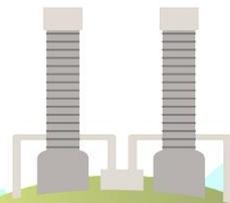


## III. VNEEP 2019-2030



### Implementation

- The Steering Committee is led by the Deputy Prime Minister (Chairman) with participation of the Minister of MOIT as the Standing Vice Chairman, and representatives of MOC, MOT, MARD, MOST, MOET, MOLISA, MIC, MPI, MOF, MONRE and VECEA as members of the Committee
- The Assistance Office established by the Minister of MOIT is located in MOIT premise
- Provincial tasks are handled and undertaken by DOITs





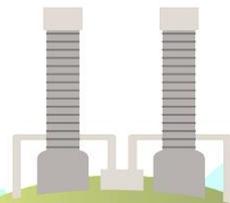
## III. VNEEP 2019-2030



### Some on-going Energy Efficiency Projects

#### EU - Viet Nam Sustainable Energy Transition Facility

- Objectives: To contribute to the sustainable transition of Viet Nam
- Implementation time frame: 2022-2027
- Financed by: EU
- Scale: total EUR 142 million which includes EUR 50 million for implementation of EE activities within the framework of VNEEP3 and three component projects implemented by UNIDO (EUR 6.5 million), GGGI (EUR 2.5 million) and other entity (EUR 3.5 million).





## III. Energy Efficiency Programs

### Some on-going Energy Efficiency Projects

#### Viet Nam Scaling-up Energy Efficiency for Industrial Enterprises Project (VSUEE)

- Objectives: To promote economical and efficient use of energy (energy efficiency) in industrial sectors of Viet Nam, contributing to achieving the national targets on energy saving, ensuring energy security and implementing tasks and targets on greenhouse gas emissions reduction and response to climate change
- Implementation time frame: 2022-2026
- Sponsor: GCF, delegated to WB for management
- Scale: total fund of USD 316.3 million including non-refundable USD 11.3 million for technical assistance and guarantee management, USD 75 million from the guaranteed source of GCF, and USD 250 million mobilized from commercial banks and enterprises





# Thank you!

## Contact information:

Department of Energy Efficiency and Sustainable Development, MOIT  
Address: Room 303-309, Building B, MOIT, 54 Hai Ba Trung Street, Ha Noi  
Website: <http://tietkiemnangluong.com.vn/>

