

THE PRIME MINISTER

SOCIALIST REPUBLIC OF VIETNAM

Independence - Freedom – Happiness

No. 20/CT-TTg

Hanoi, June 8, 2023

DIRECTIVE

**ON PROMOTING ELECTRICITY CONSERVATION DURING 2023 - 2025 AND THE
SUBSEQUENTS YEARS**

For many years, the electricity supply has been a solid foundation for our economy, supporting economic development, investment attraction, and maintenance of national security and social stability. However, the electricity supply during 2023 - 2025 and the subsequent years is forecasted to face numerous challenges due to the following reasons: (i) hydrological conditions ensuring output of hydropower plants are becoming less favorable due to climate change; (ii) the reliance on imported primary energy is increasing; (iii) wind power, solar power and other renewable energy sources are still limited; thermal power faces difficulties regarding investment expansion. Meanwhile, the power demand continues to soar 8.5%/year on average, higher than economic growth rate. Thus, it is crucial to prioritize the cost-effective and efficient use of electricity to maintain energy security, sustainable development, and economic growth over the next five years.

In that context, the Prime Minister requests:

- During 2023 - 2025 and the subsequent years, the whole country must aim to save at least 2.0% of annual electricity consumption.
- Reduce power loss throughout the entire power system to less than 6% by 2025.
- Reduce the peak load of the national power system through the implementation of demand side management (DSM) and demand response (DR) programs, by at least 1,500 MW by 2025.
- By 2030, 50% of office buildings and 50% of residential houses are expected to use solar power from solar self-consumption installation (for on-site consumption, not selling power to the national power system).
- By the end of 2025, 100% of street lighting is expected to use LED lights.

To achieve this goal, all organizations and individuals are required to seriously and actively perform electricity conservation tasks, in specific:

1. Ministries, ministerial-level agencies, Governmental agencies, People's Committees of provinces and centrally affiliated cities (hereinafter referred to as provinces), enterprises and mass organizations shall adopt a number of solutions as follows:

a) Conserving electricity at agencies and offices:

- Coordinate with local power companies in developing and implementing their electricity conservation plans, saving at least 5.0% of annual electricity consumption.
- Develop, promulgate and effectively implement regulations on electricity conservation, regulations on use, maintenance, and repair of electricity equipment on their premises.
- Ensure employees are fully aware of the importance of electricity conservation by including it as a criterion in the annual assessment of their work performance, discipline observation and commendation. The heads of agencies and offices are responsible for cases of violations against regulations on electricity conservation on their premises.
- Utilize and mobilize resources to install rooftop solar power and hot water heating systems to reduce reliance on the national electricity grid.
- Strengthen the implementation of the Prime Minister's Decision No. 68/2011/QĐ-TTg dated December 12, 2011 on the list of energy-saving devices and equipment to be provided for agencies and units using the state budget.
- Urge, review and regularly inspect the implementation of internal rules and current regulations on electricity conservation.

b) Conserving electricity in public lighting, lighting for advertising purposes, outdoor decoration:

- Organizations and individuals that manage and operate public lighting systems, lighting systems for advertising and outdoor decoration shall take charge and coordinate with electricity supply establishments in developing and implementing the electricity conservation plan, which requires that at least 30% of total electricity consumption during 2023 - 2025 must be saved for the above lighting activities.
- Apply management solutions, technical regulations and standards for public lighting; replace decorative and advertising lights with energy-efficient lights; apply automatic control technology in public lighting, lighting for advertising and outdoor decoration. Encourage the use of solar energy for advertising, decorative, and public lighting equipment.
- Initiate power-saving technology solutions in public lighting, using high-efficiency and energy-efficient lighting equipment for 100% of public lighting works in preparation for construction, renovation, and upgrade.
- Accelerate the implementation of lighting automation, taking into account the time frame and weather conditions of public lighting works.
- Restaurants, hotels, commercial service establishments, office complexes, and apartment buildings shall turn off or reduce decorative and advertising lighting capacity by at least 50%

during peak evening hours as required by the local electricity company; comply with regulations on cost-effective and efficient lighting, be ready to cut and reduce electricity demand upon notifications of the local power company in case of power shortage; coordinate with the local power company to carry out appropriate propaganda programs and forms of propaganda on saving electricity in the summer peak, programs, contests and campaigns on saving electricity in urban areas, apartment buildings, and shopping malls.

c) Conserving electricity in households:

- Use electrical equipment with energy labeling according to the Decision No. 04/2017/QĐ-TTg dated March 9, 2017 of the Prime Minister stipulating the list of equipment and appliances to which the mandatory energy labeling and minimum energy efficiency standards are applied, and the roadmap to their implementation.

- Regularly practice saving electricity at home by: turning off electrical appliances when leaving the room and cutting off the power source completely if the appliances are not in use; use the air conditioner only when necessary and set it to 26 degrees Celsius or higher in cooling mode; prioritize purchasing high-efficiency electric equipment and appliances, or those labeled with high-efficiency energy; minimize the use of incandescent light bulbs.

- Encourage the installation and use of self-consumption solar power systems for on-site use, hot water heating systems from solar energy.

d) Conserving electricity at commerce and service facilities:

- Develop and implement internal regulations on electricity use, rules on economical, safe, and efficient use of electricity at commerce and service facilities (supermarkets, shopping malls, restaurants, accommodation facilities, shops, hotels, commerce and service facilities, office complexes, apartment buildings).

- Develop and distribute the facility's energy conservation rules to customers.

- Develop plans and scenarios to coordinate with electricity companies in reducing electrical load.

- Implement the program to encourage the use of on-site energy sources namely renewable energy sources, electrical equipment using renewable energy.

dd) Conserving electricity in manufacturing enterprises:

- Encourage the implementation of the program in which participating enterprises will implement solutions on energy conservation, electricity conservation, rooftop solar power installation and consultancy on adoption of energy use solutions in a cost-effective and efficient manner.

- Speed up the implementation of the Prime Minister's Decision No. 279/QĐ-TTg dated March 8, 2018, which outlines the National Program on managing electricity demand during 2018-2020 and includes a vision for 2030.

- Develop a program to mobilize the backup power generation in case of power shortage.

- Develop and adopt solutions for cost-effective and efficient use of electricity including: ensure the correct use of load capacity and load profile; implement a reasonable production plan; minimize the mobilization of high-energy-consumption equipment and machinery during peak hours; avoid running electrical equipment without load.

- Install and integrate renewable energy sources, like solar energy and wind energy, into the internal energy system; prioritize the use of high efficiency-labeled equipment.

- Facilities that consume at least 1 million kWh of electricity annually are required to save at least 2% in electricity consumption per product unit each year or save at least 2% of total electricity consumption each year; and ensure the compliance with the Law on cost-effective and efficient use of energy and other legal documents on cost-effective and efficient use of energy.

- Industrial production enterprises that are regulated by legal documents stipulating the energy consumption norm per unit of product must comply with the prescribed energy consumption norm.

- Business facilities are encouraged to develop and apply the energy management system according to ISO 50001:2018. Conduct periodic energy audits, develop and realize annual objectives and adopt solutions on cost-effective and efficient use of energy.

- Promote the use of advanced energy-efficient techniques and improve technology in energy-intensive industries, optimize production materials, eliminate outdated production capacity, continue to improve energy efficiency through investment in energy-efficient projects.

- Initiate and apply technical guidelines on electricity conservation and cost-effective and efficient use of energy, utilize technology manuals on energy conservation for energy-intensive industries nationwide.

2. The Ministry of Industry and Trade shall:

- Take charge and cooperate with ministries, central authorities, and local governments in monitoring, urging, and inspecting the implementation of this Directive, sending annual reports to the Prime Minister and the National Steering Committee on the implementation of the National Program on cost-effective and efficient use of energy during 2019 - 2030.

- Take charge and cooperate with ministries, central authorities and local governments in implementing the tasks of the National Program on cost-effective and efficient use of energy during 2019 - 2030 and the National Program on electricity demand management during 2018 –

2020, with a vision to 2030, with a focus on demand response (DR), both commercial and non-commercial.

- Implement programs that encourage households and businesses to adopt rooftop solar power, as well as propagation initiatives designed to popularize energy-efficient equipment such as air conditioners, refrigerators, LED lights, washing machines, etc. Expand the scope of energy labeling and promote market transformation towards high-efficiency products.

- Direct the Vietnam Electricity to optimize the operation of power plants and transmission grids in order to effectively use primary energy sources and reduce power loss throughout the system.

- Collaborate with media agencies to spread awareness about saving electricity among the masses. Take charge and cooperate with ministries and central authorities, the People's Committees of provinces in spreading awareness about state policies and regulations on electricity conservation and cost-effective and efficient use of energy among the masses. Establish an annual Electricity Conservation Month.

- Urge the Departments of Industry and Trade to support industrial and service businesses in their investment and adoption of energy-efficient solutions to replace low-efficiency equipment with high-efficiency and energy-efficient equipment.

- Take charge and cooperate with ministries and central authorities in reviewing, amending and improving the system of legal documents on the energy consumption norms for product units of sectors or sub-sectors; reviewing and proposing amendments and supplements to technical standards and regulations and legal regulations on cost-effective and efficient use of energy including: Law on cost-effective and efficient use of energy; Decree No. 21/2011/ND-CP dated March 29, 2011; study and supplement the legal framework for business model of energy service company (ESCO); circulars stipulating energy consumption norms in the fields of industry, construction, transportation and other relevant legal documents.

- Coordinate with the People's Committees of the provinces in formulating annual electricity conservation targets for the provinces.

- Develop and implement plans to inspect, supervise and impose sanctions on individuals, enterprises and organizations that fail to comply with regulations on cost-effective and efficient use of energy.

- Develop rooftop solar power programs for households, businesses, state agencies, hospitals, schools (including incentive policies, communications, etc.).

- Coordinate with media agencies like Vietnam Television, Voice of Vietnam, etc. to propagate the Directive and rooftop solar power program.

3. The Ministry of Finance shall:

- Coordinate with the Ministry of Industry and Trade and related parties to research, develop, and issue, or request the competent authority to issue, a financial mechanism that allows Vietnam Electricity to record the costs related to promoting energy conservation into the business cost

- Balance and allocate funds for performing tasks on electricity conservation and funds for performing tasks under the National Program on cost-effective and efficient use of energy during 2019 - 2030 according to Decision No. 280 /QĐ-TTg dated March 13, 2019 of the Prime Minister, according to the State Budget Law, the Law on Public Debt Management and guiding documents.

- Coordinate with the Ministry of Industry and Trade and related parties to research, develop, issue, or request the competent authorities to issue, financial mechanisms and policies to promote market development of energy service companies, incentives for customers to participate in demand response.

4. The Ministry of Planning and Investment shall take charge and cooperate with the Ministry of Industry and Trade and the Ministry of Finance in considering regulations that require public investment projects to install rooftop solar equipment in buildings.

5. The Ministry of Science and Technology shall cooperate with relevant ministries and central authorities in reviewing, amending, formulating, and promulgating national technical standards and technical regulations on energy efficiency for power consuming equipment.

6. The Ministry of Information and Communications shall coordinate with the Ministry of Industry and Trade in directing radio and television stations and central and local press agencies to consistently broadcast radio and television programs promoting electricity conservation, unit price application and preferential policies to disseminate knowledge and encourage conservation practices.

Direct central and local press agencies to actively coordinate with the Ministry of Industry and Trade and Vietnam Electricity in carrying out propagation activities in various and suitable forms on electricity conservation during the peak summer season, programs, contests, and campaigns on saving conservation .

7. Ministries and central authorities shall

- Closely coordinate with the Ministry of Industry and Trade to perform the assigned tasks under this Directive of the Prime Minister.

- Initiate and implement electricity conservation plans, distribute the plans to all units and individuals under their management. Closely inspect and supervise electricity usage costs in recurrent expenditures of public sector entities as prescribed.

8. The People's Committee of province shall:

- Develop, issue, and implement their electricity conservation plan. Implement the issued plan in an effective and synchronous manner and regularly monitor, supervise, and examine to ensure the achievement of the set annual targets. Develop annual and periodic electricity conservation targets, allocate electricity conservation targets and evaluate their achievements in each district, and city in the planning year.

- Spread awareness about electricity conservation to people from all social strata through different forms such as printing panels, posters, propagation contents on the online Public Service Portal of the province, on the digital citizen applications of the province, on the radio and television programs, electronic and paper newspaper, and holding contests on electricity conservation. Spread awareness about compliance with regulations on cost-effective and efficient use of energy and participation in demand response as required by electric system regulations among key electricity consumers and users.

- Direct and supervise the power companies' implementation of monthly electricity conservation and reduction plans when there are electricity shortages during peak hot months and the dry season. Request local power companies to coordinate with businesses and organizations located in the area to develop electricity conservation plans. Assist People's Committees at all levels to make statistics on the effectiveness of electricity conservation plans implemented by local enterprises and organizations.

- Commend, and propose competent state agencies to commend, agencies, units, organizations and individuals who have made significant achievements in saving electricity.

- Inspect and oversee the electricity consumption of key energy-using facilities. Thoroughly inspect and take strict actions against all cases of violations of applicable regulations on cost-effective and efficient use of energy. Annually, publicly announce on the online public service portals the electricity conservation effectiveness of the People's Committees of provinces, public sector entities, the energy consumption levels of the manufacturing enterprises subject to compliance with State regulations.

9. Ministries, central and local agencies and People's Committees at all levels shall:

Guide, inspect, supervise, approve, and review public procurement projects, thoroughly comply with Decision No. 68/2011/QĐ-TTg dated December 12, 2011 of the Prime Minister on promulgation of the list of energy-saving equipment that may be purchased by the agencies funded by Government budget; supervise the electricity consumption cost in recurrent expenditures of public sector entities according to the regulations on electricity conservation levels of this Directive.

10. Vietnam Electricity shall:

- Coordinate with the Ministry of Industry and Trade to organize the implementation of electricity conservation programs and plans during 2023 - 2025 and the following years. Formulate, implement, and report to the Ministry of Industry and Trade the results of the implementation of the annual and periodical electricity conservation programs and plans.

- Optimize the operation of power plants and transmission grids in order to effectively use primary energy sources and reduce power loss throughout the system. Reasonably mobilize capacity and electricity from various sources, including hydropower plants, power sources purchased from independent power plants, renewable energy plants and customer backup sources.

- Develop plans for periodical maintenance of power plants and mobilize optimal units to meet technical requirements in efficient operation and utilization of power sources. Work closely with the National Center for Meteorology and Hydrology to update forecasts on weather and water sources, especially bulletins forecasting water sources during dry season, drought, and water shortage. Coordinate with relevant agencies and units to develop reservoir operation plans that optimize water regulation for various use purposes, save and efficiently use water sources, and ensure downstream water supply safety.

- Implement technical management solutions, invest, renovate and upgrade the power grid, strengthen technical management, limit incidents, ensure the safe, stable and reliable operation of the power grid, reduce power loss.

- Encourage customers to sign commitments to save electricity and reduce usage during power shortage; develop backup mobilization plans, and promote participation in backup power generation in case of power shortage.

- Focus on propagating cost-effective and efficient use of electricity in households, office buildings, apartment buildings, businesses, administrative offices, schools in provinces and cities; carry out appropriate forms of propagation on saving electricity during the peak summer season, programs, contests, and campaigns on saving electricity. Promote the development of self-consumption rooftop solar power for the on-site use needs of electricity users who are households, public sector entities, hospitals and schools; customers in industrial zones; livestock and farming farms (installed on the roofs of existing constructions), especially in the Northern area.

- Take charge and cooperate with relevant agencies in researching, developing and reporting to the Committee for Management of State Capital at Enterprises, and then requesting competent authorities to issue a financial mechanism that allows Vietnam Electricity to record their cost to promote electricity conservation into their business cost.

- Cooperate with the People's Committees, businesses, and organizations located in the area to develop electricity conservation plans. Coordinate with the Department of Industry and Trade to update and send to the People's Committee of province reports on annual electricity consumption of electricity users.

- Coordinate with relevant units to make statistics and monitor the electricity conservation of agencies, offices, state-owned enterprises, and public lighting to advise and propose to the Ministry of Industry and Trade and the People's Committee of province to adopt solutions for cost-effective and efficient use of electricity.

- Coordinate with manufacturing enterprises, commerce and service facilities, urban area investors, and building management boards to strictly implement the Directive.

- Before February 1 every year, send final reports to the Ministry of Industry and Trade, direct the subsidiaries to send final reports to the People's Committee of province, and related agencies and units on implementation results of electricity conservation programs and plans nationwide, so that ministries and central authorities, and People's Committee can take actions against entities that violate regulations on electricity conservation.

11. Ministers, Heads of ministerial-level agencies, Heads of Governmental agencies, Presidents of People's Committees of provinces, Chairman of Members' Council, General Director of Vietnam Electricity, heads of agencies, units and organizations and individuals engaged in electricity activities and electricity users shall implement this Directive.

12. This Directive supersedes Directive No. 20/CT-TTg dated May 7, 2020 of the Prime Minister on enhancing electricity conservation during 2020 - 2025./.

**PP. PRIME MINISTER
DEPUTY MINISTER**

Tran Hong Ha