



NATIONAL ENERGY EFFICIENCY & CONSERVATION POLICY 2023



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GLOSSARY OF TERMS

AC	Alternate Current
AEDB	Alternate Energy Development Board
AJ&K	Azad Jammu & Kashmir
CAGR	Compound Annual Growth Rate
CBAM	Carbon Border Adjustment Mechanism
CCI	Council of Common Interests
CPPs	Captive Power Plants
CSR	Corporate Social Responsibilities
DC	Direct Current
DFI	Development Finance Institutions
DISCOs	Distribution Companies
DSM	Demand Side Management
ECF	Energy Conservation Fund
ECT	Energy Conservation Tribunal
EE	Energy Efficiency
EE&C	Energy Efficiency and Conservation
EIH	Energy Information House
EnMS	Energy Management System
ENERCON	Energy Conservation Centre
EPC	Energy Performance Contract
ESCO	Energy Service Company
EUI	Energy Use Index
EV	Electric Vehicles
EVSE	Electric Vehicle Supply Equipment (Charging Infrastructure)
FY	Financial Year
GB	Gilgit Baltistan
GBGs	Green Banking Guidelines
GDP	Gross Domestic Product
GENCOs	Generation Companies

GHG	Greenhouse Gases
GSP+	Generalised Scheme of Preference Plus
G2G	Government to Government
HRS	Heat Recovery Systems
ICE	Internal Combustion Engine
IE2	International Efficiency Class 2
IOT	Internet of Things
ISO	International Organization for Standardization
Kgoe	Kilogram of Oil Equivalent
KPIs	Key Performance Indicators
KRIs	Key Risk Indicators
LNG	Liquified Natural Gas
LPG	Liquified Petroleum Gas
MEPS	Minimum Energy Performance Standards
MIS	Management Information System
MJ	Megajoule
MOE	Ministry of Energy
MOIP	Ministry of Industries and Production
MOCC	Ministry of Climate Change
MOST	Ministry of Science and Technology
MRV	Measuring, Reporting and Verification
MTOE	Million Tons of Oil equivalent
MTCO₂e	Million Tons of Carbon Dioxide Equivalent
NDCs	Nationally Determined Contributions
NEP	National Electricity Policy 2021
NE-Plan	National Electricity Plan
NEECA	National Energy Efficiency and Conservation Authority
NEEC	National Energy Efficiency & Conservation
NEPRA	National Electric Power Regulatory Authority
NGO	Non-Governmental Organization

NLC	National Logistics Cell
NTDC	National Transmission and Despatch Company
NTRC	National Transport Research Centre
OGRA	Oil & Gas Regulatory Authority
PRS	Product Registry System
PCSIR	Pakistan Council for Scientific and Industrial Research
PDA	Provincially Designated Agency
PEECA	Punjab Energy Efficiency & Conservation Agency
PIA	Pakistan International Airline
PNAC	Pakistan National Accreditation Council
PPP	Purchasing Power Parity
PPRA	Public Procurement Regulatory Authority
PSQCA	Pakistan Standard and Quality Control Authority
R&D	Research & Development
RPS	Renewable Portfolio Standards
SBP	State Bank of Pakistan
SEECA	Sindh Energy Efficiency & Conservation Agency
SMEs	Small and Medium Enterprises
SNGPL	Sui Northern Gas Pipelines Limited
SRO	Statutory Regulatory Order
SSGC	Sui Southern Gas Company
UFG	Unaccounted for Gas
VFD	Variable Frequency Drives
WAPDA	Water and Power Development Authority

PREAMBLE

Energy Efficiency and Conservation (EE&C) paves the way for sustainable development. The surge in energy prices, exchange rate volatility, increasing demand for energy, and depleting energy resources necessitates Pakistan to opt for higher energy efficiency and conservation measures. Improvement in energy efficiency and conservation is one of the easiest and least cost-effective pathways to improve country's energy sector sustainability. EE&C is the cornerstone for the sector's planning and policy formulation – saving one unit is always cheaper than producing one unit of energy. This can produce the co-benefits of industrial competitiveness, reduction in energy import bill, transition to clean energy, improvement in access to energy, and achieving the Nationally Determined Contributions (NDCs) target¹ as well as Sustainable Development Goal (SDG) # 7². This policy will substantially contribute to Pakistan's Climate Change Mitigation given the share of Energy Sector in the NDCs.

Integration of Energy Efficiency and Conservation in the energy planning and policy formulation remained an unattended agenda. Energy sector has become a conundrum faced with challenges of high prices, peak demand, and circular debt which is often addressed through change in tariff regimes. Seasonally, in peak summer days there has been a shortage of electricity, whereas in peak winter days country faces gas shortages. For the rest of the year, the demand and supply remain mostly stable, however, capacity additions result in capacity payments in power sector. The demand-side management through EE&C measures can be a silver bullet for peak shaving. Similarly, the integration of EE&C measures in different sectors of the economy can be instrumental to achieving sustainability goals. As per Business-as-Usual scenario, the primary energy supply of Pakistan is expected to be 116 MTOE by 2030. However, the implementation of national energy efficiency and conservation policy sets the saving target of 9 MTOE, with reduction in the GHG emissions by 35 MTCO₂e.

The promulgation of the National Energy Efficiency and Conservation Act of 2016 strengthened the EE&C agenda in the country. Moreover, there is an increasing demand to develop effective regulatory measures complemented with appropriate by-laws, regulations, policies, programs, technical, economic, and fiscal interventions for an effective governance framework for EE&C in Pakistan.

The National Energy Efficiency and Conservation Policy 2023 identifies mechanisms to ensure deep-rooted institutionalization, operationalization, and implementation of EE&C in the country and consists of sectoral measures for Industry, Building, Transport, Energy (Power and Petroleum), and Agriculture sectors. The policy also informs, on the basis of techno-economic analysis, enforcement mechanisms required for adoption and compliance of EE&C regulatory measures along with precise guidelines for coordination with the provincial governments and regions. Holistically, the policy provides a framework to develop an eco-system to steer EE&C and developing synergies inclusive of all public and private sector stakeholders.

¹ Pakistan has set ambitious targets of overall 50% reduction of its projected emissions by 2030 (15% from own resources and 35% by financing from international partners)

² SDG # 7 aims to double the global rate of improvement in energy efficiency by 2030, earlier it was Sustainable Energy for All initiative.

1 VISION

To steer Pakistan towards a culture of conservation and efficient use of energy resources to achieve sustainable development.

2 GOAL

Double the rate of improvement in energy efficiency, ensuring cost-effective measures, and developing market-based mechanisms³.

3 GUIDING PRINCIPLES FOR THE NEEC POLICY

Six principles shall inform the actions and plans of the NEEC Policy to achieve the above identified goal:

3.1 CONSERVATION-THE FIRST FUEL

Energy conservation is the strategic priority as a first fuel from planning and decision making to the execution of the action plans of all sectors of the economy. Conservation is the core guiding principle of the NEEC policy and has been translated into the policy objectives, actions, and measures with an aim to increase the demand for this first fuel in Pakistan. Adherence to this principle will result in less energy intense society, more inclusive growth, and high productivity.

3.2 SUSTAINABILITY

The integration of EE&C in national energy planning and policy making ensures achieving the objectives of the sustainability. Energy efficiency is one of the key levers for decarbonizing the economy. Implementation of EE&C policy directly achieves NDCs (Nationally Determined Contributions) targets. This characteristic of energy efficiency qualifies it to be the Climate Mitigation Policy of Pakistan. Therefore, all aspects of the EE&C shall be guided by the climate change targets benchmarked with Pakistan's energy sector.

Further, the transition to renewable energy and its coupling with the energy efficiency is another lever for economic sustainability. This requires that all EE&C policy interventions and sectoral measures shall support and promote deployment of renewable energy sources, where possible, including solar, wind, hydel, bio-mass, hydrogen, and geothermal.

3.3 VALUING CO-BENEFITS

EE&C offers proven co-benefits such as industrial productivity, market competitiveness, reduction in GHG emissions, and job creation in the local economy. These benefits will accrue at the macro-level through improvement in energy efficiency within the energy industry (upstream, midstream, and downstream), and at a national level (e.g., improved energy access, industrial productivity,

³ To decrease Energy Intensity from 2.75 to 2.54 MJ/USD by 2030 (at constant PPP₂₀₁₇) – calculations based on Pakistan Energy Yearbook 2021 and GDP Data from World Bank at constant PPP₂₀₁₇. The following formula
Energy Intensity = (primary energy supply in MJ / GDP at constant PPP₂₀₁₇)

emissions reduction, import bill reduction etc.). All the national level- policies, programs, and projects shall be designed and reviewed by considering the benefits of EE&C.

3.4 ACCESS TO ALL

Universal access to reliable and affordable energy is crucial for human development. EE&C leads to saving in energy-resource-use- which enables the access to energy. The policy focus will be to design and prioritize such EE&C actions that ensure sustainable energy for all.

3.5 EVIDENCE BASED APPROACH

EE&C intervention across all the sectors shall be designed based on empirical evidence. EE&C data through digital applications shall be developed in order to facilitate the consumers, manufacturers and all relevant stakeholders to make evidence based rational choices. This will have multiple benefits including the improvement in energy efficiency at national level through better availability of energy monitoring, reporting and evaluation system.

3.6 BEHAVIORAL CHANGE

Responsible use of energy resources require behavioral change at national level for which EE&C strategies and actions will play an important role. The policy identifies and recommends tools that prescribe energy conservation actions and modify the consumer behavior. The behavior-change strategies, nudging and best practices shall be adopted through training, capacity building, awareness, and outreach campaigns.

4 SETTING THE CONTEXT FOR ENERGY EFFICIENCY & CONSERVATION IN PAKISTAN

The Energy Conservation Centre (ENERCON) was established in 1985 in the country, and, over the years, various EE&C interventions were undertaken by the ENERCON being the custodian for EE&C in the country (ENERCON transformed into NEECA).

With the promulgation of National Energy Efficiency & Conservation Act 2016, a renewed focus on EE&C was witnessed in the national energy sector. This provided a much lucid and robust governance framework for institutionalization and implementation of EE&C in the country. However, the changing landscape in national energy sector as well as high priority of climate change agenda at global level required more ambitious interventions through EE&C.

The detail policy process adopted for the formulation of policy is attached at **Appendix (II)**. The NEEC Policy, informs on these major gaps which are categorized on the basis of a comprehensive EE&C gap analysis of the country, which are listed as under:

4.1 INSTITUTIONAL & REGULATORY GAPS

Electricity remained in the Federal Legislative List and the energy was made a provincial subject – Post 18th Amendment. Therefore, ENERCON's mandate required strong intergovernmental coordination between Federal and Provincial Governments. The provincial governments further reassigned the energy efficiency and conservation mandate to provincial energy departments.⁴ Overall, at national and provincial levels, the focus largely remained on the power generation to meet the increasing energy demand; the demand side energy management (DSM) remained low priority agenda item. Further, at provincial level there is a need of dedicated agency(ies) and human resource specialized in energy efficiency and conservation implementation.

4.2 ECONOMIC AND FINANCIAL GAPS

Economic and financial mechanism are enablers for the adoption of energy efficient technologies, practices, and management in key sectors of economy. It is assumed that EE&C projects have high upfront costs and long paybacks. There are no specific financial/credit products that have been developed for EE&C by financial institutions. The investments for EE&C projects remain low due to:

- No performance guarantees for the solution providers.
- No risk coverage for investors or tax rebates/credits for investing in EE&C projects.

The State Bank of Pakistan (SBP) issued Green Banking Guidelines (GBG) in 2017 for banks/DFIs as a first step to a series of interventions leading to a sustainable economic environment in the banking sector. The guidelines for EE&C need to be incorporated in GBG for implementation with concessional re-financing facilities.

Financially, project-based financing is usually limited to organizations with long credit history. Most of the industrial enterprises in Pakistan are SMEs having low credit worthiness. In absence of risk coverage for SMEs, financial institutions have minimal exposure/lending. As a result, financial

⁴ Sindh Energy Efficiency and Conservation Agency (SEECA) established in 2022. Punjab Energy Efficiency and Conservation Agency (PEECA) is operational since 2016.

institutions offer a higher markup as a risk premium for SME finance, resulting in reluctance to take on loans for any EE improvement project.

4.3 TECHNICAL AND OPERATIONAL GAPS

There is a limited availability of EE products in the local market which is primarily supply driven. Due to limited number of suppliers, there is a lack of competition and transparency regarding the quality and pricing. Moreover, there are following operational and technical gaps:

- Energy performance claims of equipment suppliers cannot be cross checked due to the limited testing infrastructure in Pakistan.
- The end user lacks the knowledge and capacity to identify, develop, and implement energy efficiency measures.
- In the absence of independently certified auditors, industry rely on their in-house staff's judgment on EE&C projects which, lack the training/acumen to understand and perceive such interventions.
- The manufacturer/ supplier of energy efficient appliance and equipment fear lack of demand from the end-user. This dis-incentivizes the introduction of new energy efficient technology in the market.

Adoption of energy performance standards is the most challenging task for successful implementation of EE &C policies in Pakistan. This will require the development and enforcement of rules and regulations to implement the Minimum Energy Performance Standards (MEPS). At present, NEECA has developed MEPS for electric appliances. The voluntary Energy Label Regime for electric fans is being implemented. However, the enforcement and surveillance for mandatory regime will largely rely on availability of accredited testing infrastructure.

4.4 INFORMATIONAL GAPS

Information asymmetry exists between the producers and consumers. The dissemination of information, about the importance and benefits of opting energy efficiency and conservation measures, to all types of consumers, is crucial, particularly women in household. However, sustained efforts are needed to increase awareness about EE&C measures. Long-term actions/programs/campaigns are needed to improve awareness about the importance of EE &C in the country.

- Information is not properly integrated regarding EE&C in all educational institutions such as school, colleges, polytechnic institutes, madrasas, and universities to sensitize the young generation.
- Specific courses and programs are not designed and offered about EE &C.

Awareness of energy efficiency opportunities in the commercial sector is even lower than the awareness in the industrial sector. Real Estate Developers do not take the EE aspects into account during the design of commercial properties such as shopping malls, housing schemes, etc. Similarly, financial institutions lack awareness on energy efficiency, especially with respect to assessment of technical and economic viability of EE projects.

5 STRATEGIC SECTORS

The five sectors i.e., industry, transport, buildings, energy (Power & Petroleum) and agriculture have been prioritized to achieve energy efficiency and conservation goals. The policy interventions of each sector are given as:

5.1 INDUSTRIAL SECTOR

Industry is responsible for the largest share of energy use at 37.1 percent. The industrial sector is highly energy intensive with an intensity of 0.117 kgoe/\$GDP(PPP) versus 0.08 kgoe/\$GDP in Europe⁵. Internationally, there is an increasing demand of products with higher levels of energy efficiency as a mean to reduce carbon emissions. Pakistan's traditional export markets are adopting various trade tools i.e. EU's CBAM/GSP+ etc. to reduce GHG emissions. The policy sets the target of saving 2.3 MTOE of energy which will result in emission reduction of 8.97 MTCO₂ by 2030. The following key sectoral measures will be implemented in phased manner, but not limited to:

- Ban on the manufacture, sale, and import of motors having lower than International Efficiency Class 2 (IE2) standard by 2027.
- Industrial boiler tune-up, retrofitting, and replacement for energy efficiency improvement, where all inefficient boilers will be replaced by 2026.
- Industrial furnaces tune-up, retrofitting, and replacement for energy efficiency improvement, where all inefficient furnaces will be replaced by 2028.
- Mandatory energy audits of designated consumers in the industrial sector with verifiable five-year energy saving plan by 2026.
- Placement of energy managers and deployment of Energy Management System (EnMS) across designated consumers of industrial sector 2026.

5.2 BUILDING SECTOR

The building sector includes all kind of residential, commercial, public and private buildings. The demand for new construction is growing at a rate of 5.3 % annually due to high population growth and urbanization. By 2023, over 40 million people are expected to live in urban centers and towns, which implies that many buildings will be under construction or are being planned. These constructions demand a high level of energy efficiency to minimize the energy consumption in the medium and long run. Further, the retrofitting of existing buildings with energy efficient technologies and adoption of energy conservation practices offer significant energy savings given that residential buildings alone account for 22.2 % of final energy consumption and 24.87 million Tons of GHG emissions.

This policy sets the target of saving 2.2 MTOE of energy in the building sector which will result in emission reduction of 8.29 MTCO₂ by 2030 through following sectoral measures, but not limited to, in phased manner:

⁵ The World Bank Data- <https://data.worldbank.org/indicator/EG.EGY.PRIM.PP.KD?locations=PK>

- In new buildings, mandatory compliance of Energy Conservation Building Codes (ECBC) by end of 2024.
- In old buildings, mandatory energy audits of designated consumers with five-year energy saving plan by 2025.
- Compliance of minimum energy performance standards and labelling regimes for electric & gas appliances, and equipment by July 2023.
- PPRA shall issue public procurement guidelines ensuring procurement of Pakistan energy label appliances in the country.
- Annual market survey for energy efficient appliances and equipment.
- Placement of energy managers at designated consumers of the building sector for verifiable energy management system deployment vis-à-vis regular reporting.
- Mandatory energy audits pre- and post-solarization initiative in the public buildings.
- In collaboration with Provincial Designated Agencies, deployment of solar or other distributed energy resources.

5.3 TRANSPORT SECTOR

The transport sector accounted for 30.3 percent of total final energy consumption, and it heavily rely on imported fuel. Liquid fuels dominate in the transport energy mix. The number of cars and motorcycles has been growing at 10 percent annually, consequently increasing the demand for fuel. As of 2021, the total number of registered vehicles are around 32.3 million out of which two wheelers (motorbikes) have reached to 25 million.

National Electric Vehicle Policy 2019 provides NEECA with the mandate to develop and enforce standards of EV charging stations. Energy efficiency benefits in the transport sector will be introduced through electrification of existing (two and three wheelers) and new vehicles.

This policy sets the target of saving 2.48 MTOE of energy which will result in emission reduction of 7.7 MTCO₂ by 2030 through following sectoral measures, but not limited to, in phased manner:

- Implementation and development of codes and standards associated with Electric Vehicle Supply Equipment (EVSE), Electric Vehicles (EVs) and the related charging infrastructure by 2025.
- Enforcement and development of National Fuel Economy Standards and vehicle/fleet retirement age for transport sector of Pakistan by 2026.
- Mandatory annual tune-up certification for Internal Combustion Engine (ICE) vehicles, on road for 5 years or more, across the country by 2025.
- Promotion of car-pooling and use of mass transit through measures such as, but not limited to, segregation of toll taxes on motorways and segregation of fuel prices for private vehicles (two, three, four wheelers).
- Mandatory yearly energy audits of public sector transport fleets by 2023.

5.4 ENERGY SECTOR

The energy efficiency and conservation in Pakistan's energy sector requires sectoral measures at both Power and Petroleum Divisions under the umbrella of Ministry of Energy:

5.4.1 POWER SECTOR

Pakistan's Power sector losses are high compared to regional countries. The average power distribution losses in Pakistan are about 20% and for some DISCOs, these losses reach to more than 38%. The installed generation capacity has reached at 41557 MW against maximum total demand of 30,000 MW, whereas the transmission and distribution network is constrained to evacuate 22,000 MW which lead to operation of inefficient power plants over efficient power plants.

The energy efficiency & conservation measures at the demand side will support the objectives of the National Electricity Policy 2021 of the power sector. This NEEC policy sets the target of saving 1.05 MTOE of energy which will result in emission reduction of 6.1 MTCO₂ by 2030 through following sectoral measures, but not limited to, in phased manner:

- Jointly establish Energy Efficiency & Conservation Cells at all the DISCOs for the capacity development of power sector entities to implement the EE&C measures for system improvement.
- Implementation of Demand Side Management (DSM) programs in collaboration with MIRAD (Market Implementation & Regulatory Affairs Department).
- Bi-annual Heat Rate Assessment of GENCOs and IPPs to ensure performance as per designed efficiency in collaboration with CPPA-G and NEPRA by 2024.
- Establish evaluation mechanism of energy efficient appliances during basic load profiling for new electricity and gas connection across commercial, household, industrial, agriculture sectors by 2024.
- Mandatory certification of captive power plants through a national energy saving certification program by 2025.
- Design and implementation of Renewable Portfolio Standards (RPS) in collaboration with NTDC, GENCOs and IPPs by 2025 especially where the power evacuation is underutilized.

5.4.2 PETROLEUM SECTOR

Petroleum sector has more than 70 percent share of primary energy supply in the country with share of oil 22.6 percent, gas 33.1 percent, LNG import 10.3 percent and LPG 1.3 percent. There is a significant savings potential in Petroleum sector i.e. improvement in the quality of oil & gas supply, midstream and downstream. This policy sets the target of saving 0.4 MTOE of energy (gas) which will result in emission reduction of 0.94 MTCO₂ by 2030 through following sectoral measures, but not limited to, in phased manner:

- Jointly design and implement medium- and long-term energy loss reduction programs to comply with international standards and regulatory benchmarks by 2025.

- Development and implement medium- and long-term winter load management programs at gas sector utilities by 2025.
- Establish mechanism of basic and annual load profile assessment of domestic, commercial, and industrial gas consumers along with profiling of gas-based appliances.

5.5 AGRICULTURE SECTOR

Agriculture sector accounts for 1.5% of total final energy consumption. The use of commercial energy is steadily increasing as mechanized practices are being adopted to improve agricultural productivity. The process of irrigation through diesel and electric powered pumps is extremely inefficient. Effective energy efficiency measures for tube well, tractors and other farm machinery will help farmers to save energy, reduce production costs, increase yield and profit.

This policy sets the target of saving 0.64 MTOE of energy which will result in emission reduction of 2.82 MTCO₂ by 2030. The following measures, but not limited, shall be initiated in a phased manner to improve energy efficiency in the agricultural sector:

- Implementation of energy efficiency standards and solarization of water pumps and tube-wells by 2024.
- Implementation of Fuel Economy Standards for tractors and farm machinery by 2025.
- Establishment of tune-up centers for tractors and tube-wells through third-party mechanism by 2025.
- Establishment of Energy Efficiency Benchmarks for Cold Storage Houses.

6 POLICY MEASURES AND DELIVERABLES FOR EE&C

The development and implementation of necessary policy measures demands for the establishment of robust institutional framework. To achieve energy efficiency deliverables a strong national commitment and provincial coordination is required. Informed and evidence-based policy measures play an important role to create appropriate conditions for increase in the demand for energy efficient products and services.

The sectoral measures are prioritized based on the saving potential in the Industry, Building, Transport, Power & Petroleum, and Agriculture sectors, as well as strategic areas of energy-water and food nexus. During the initial period of policy implementation, the high priority areas of action will be identified like;

- Baseline studies; surveys; formulation of sectoral strategies; development of information systems
- Demonstration and implementation of low and medium-cost, fast pay-back interventions

6.1 REGULATORY FRAMEWORK

The necessary legislations, regulatory framework, implementation mechanisms, rules and procedures shall be developed in close consultation with Provincial Designated Agencies. The provincial designated agencies shall develop frameworks, as necessary, to create a culture for rational and efficient energy use under the provisions of NEEC Act 2016.

Following no/low-cost policy measures will be implemented to achieve targets of energy savings by 2030:

- Mandatory compliance of minimum energy performance standards and labelling regimes for electric & gas appliances, and equipment
- Mandatory procurement of energy efficient equipment in all public procurements by incorporating Minimum Energy Performance Standards (MEPS) in PPRA rules
- Implement and develop framework including Monitoring, Reporting & Verification (MRV) systems for designated consumers across the sectors.
- Effective complaint redressal framework through establishment of Energy Conservation Tribunals
- Implement and develop mechanism for Energy Management Systems in Cities and Municipalities.

6.2 INTEGRATION OF EE&C IN SECTORAL POLICIES

Federal and provincial governments including AJ&K and GB shall review and integrate EE&C in all policies, plans and programs approved from time to time. NEECA shall develop coordination mechanism for inclusion of EE&C provisions in National and Provincial Policies to ensure compliance and enforcement of the efficiency standards and conservation measures through Provincial designated agencies. The policy statement for integration of EE&C in different sectoral policies should be incorporated in the policies at **(Appendix - III)**.

6.3 MINIMUM ENERGY PERFORMANCE STANDARDS

Development of Minimum Energy Performance Standards (MEPS) are essential as they guide and motivate manufacturers to adopt and manufacture efficient practices, processes, and appliances.

- NEECA, in consultation with manufacturers, retailers, associations, experts and all other relevant stakeholders shall draft the MEPS for energy consuming appliances & equipment and recommend them to PSQCA for adoption and implementation at the national level from time to time.
- MEPS for electrical appliances (fans, air conditioners, refrigerators, motors, LEDs) shall be implemented on priority basis by 2023.
- MEPS for gas appliances (geysers, space heaters, cook stoves) shall be developed and implemented on priority basis by 2024.
- Develop MEPS for transformers, cables, and other electrical equipment for power transmission & distribution by 2026.

6.4 ENERGY LABELING REGIME

Labels help consumers to distinguish the energy performance of equipment and appliances, thus, rallies the demand for energy efficient products in the market.

- The compliance of energy labelling regime for energy consuming appliances (fans, air conditioners, refrigerators, motors, LEDs), gas appliances (Geysers, space heaters, cook stoves) and other energy consuming products shall be ensured, subject to the availability of testing laboratories.

NEECA shall review and improve necessary frameworks, mechanisms and procedures for coordination and implementation of energy labelling regime(s) with Pakistan Council for Scientific and Industrial Research (PCSIR), and other relevant bodies at provincial and/or federal level.

6.5 ACCREDITED TESTING LABORATORIES

Successful adoption and promotion of energy efficient appliances require adequate facilities of energy standards and certification laboratories. Pakistan National Accreditation Council (PNAC) has 230 active registered laboratories for different sector. NEECA shall establish and maintain accredited/enlisted laboratories which are not available under PNAC, for conducting tests and analysis to improve the performance of its functions and to conduct research in various aspects of energy efficiency:

- Development of a competitive market for appliances and equipment testing services and facilities both in public and private sectors in the country.
- A cost-effective Government-to-Government (G2G) mechanism shall be developed where coordination with the International Testing Laboratories will be established
- G2G operational framework shall be used as an exchange platform to learn from the experiences of other countries to develop policies and identify best practices along with

capacity building of local human resource in harmonization of MEPS and setting up the testing labs.

- NEECA in collaboration with PNAC shall enlist Labs in Universities where requisite testing equipment is available.

6.6 ENERGY AUDITS, ASSESSMENTS AND MANAGEMENT SYSTEMS/PROGRAMS

Energy audits, assessments, and the implementation of a holistic Energy Management System (EnMS such as ISO 50001) offer improved energy intensity; reduced energy costs; and the carbon footprint of the building and industrial sectors' energy consumptions. Following policy measures shall be implemented:

- The energy audits for facilities and business operations of designated consumers shall be introduced in the short run, followed by a mandatory energy audit and assessment regime across key sectors of the economy in the medium and long term.
- Energy performance Certificate Regime shall be developed to achieve the market transition with an increased demand for energy efficient practices, operations, and facilities. The Energy Performance Certificates shall be issued by NEECA to the designated consumers in compliance with the mandatory energy audit and assessment regime by 2026.
- Energy audits, assessments and EnMS for industrial and building sectors, particularly for small and medium enterprises (SMEs)⁶, shall be launched to replicate the adoption of the EnMS.
- The R&D for improvement in the EnMS related best practices, technological innovation and showcasing the business viability shall be made an integral part. The capacity building of local workforce through on-site trainings shall also be prioritized in such projects.

6.7 ENERGY MANAGERS AND AUDITOR CERTIFICATION

The certification of energy auditors and managers will help to build the skilled work force for EE&C market, improve the existing capacity and ensure a high and consistent standard for carrying out energy audits and energy assessments in the country.

- NEECA shall define the curriculum for energy auditors & managers, and certification regime for this workforce.
- NEECA while engaging universities and third-party organizations, shall conduct Training of Trainers of 1000 energy auditors and managers under various categories in both building and industrial sectors initially during three years for certification of Energy Auditors and Managers by 2025.
- Internationally certified energy auditors from recognized standard bodies will also be harmonized to Pakistan's Energy Auditors and Managers Regime.

⁶ As defined in SME Policy 2021

The designated consumers through a certified/enlisted energy manager will be managing/supervising their EnMs along with reporting to the authorities concerned. Similarly, energy auditors shall be certified/enlisted for energy audits under the same regime.

6.8 ESCO (ENERGY SERVICE COMPANIES) MARKET DEVELOPMENT

Implementation of energy efficiency retrofits and process improvements that pays for itself through energy saving will be a catalyst for achieving the desired impact of the national EE&C efforts. A developed Energy Service Companies (ESCO) market in the country offers such catalyzing effect.

NEECA shall develop an enlistment program for local companies fulfilling the NEECA registration criteria to operate under the ESCO model⁷ for providing energy services. An operational ESCO Model shall enable the energy consumers to retrofit to more efficient technologies, cutting down their investment cost and energy demand.

- It is estimated that there is potential of \$ 1 Billion for ESCO market development⁸ in Pakistan. NEECA will work closely with financial institutions and Banks to establish ESCO market for EE&C gains.

NEECA shall develop a 'Super ESCO Model' under the Energy Conservation Fund (ECF) to de-risk the investments in EE&C projects and mobilizing private sector capital.

6.9 INCENTIVIZING AND FINANCING OF ENERGY EFFICIENCY AND CONSERVATION

Fiscal and financial incentives are essential to achieve energy efficiency improvements. These incentives will be provided to encourage investments in energy efficiency by bringing down the equipment and process costs. The policy instruments for financing energy efficiency and conservation shall be developed in close consultation and coordination with relevant Federal and Provincial Governments and regions, public and private stakeholders. These shall include, but not limited to:

6.9.1 INNOVATIVE FINANCING FOR ENERGY EFFICIENCY

NEECA shall develop programs and initiatives in close coordination with Ministry of Finance, Revenue Division/Federal Board of Revenue, Ministry of Commerce, State Bank of Pakistan, DFIs and other relevant financial stakeholders to attract, increase, and incentivize the level of public and private investment in the domestic EE&C Sector. The programs shall be designed to build the capacity within the financial sector to finance viable energy efficiency projects.

- Concessional financing facilities shall be provided to retrofit existing buildings, appliances and industrial facilities with a goal to shorten the payback times and rally investments in the energy efficiency initiatives/projects.

NEECA shall carry out, through the Energy Conservation Fund (ECF), investments in the form of equity financing in the development of energy efficiency projects, capable of generating technical and

⁷ An energy service company (ESCO) is a commercial business offering a range of comprehensive energy solutions including design and implementation of energy efficiency & conservation projects, and risk management.

⁸ As per the discussion with SBP

financial returns, and work to increase the level of private sector (especially SMEs) investment into efficiency.

- NEECA may raise equity through launch of Energy Efficiency Bonds to fund innovative financing platforms which may include, among other, Revolving Guarantee/Loan Fund, Carbon Markets by 2025.

6.9.2 EXEMPTION OF CUSTOM DUTIES AND TAXES ON ENERGY EFFICIENCY EQUIPMENT

Fiscal incentive has an indirect impact on the investments in the EE&C sector and includes tax credits, exemption on custom duties and taxes on energy efficiency equipment and processes. Based on a careful techno-economic and cost-benefit analysis:

- NEECA shall coordinate with the Ministry of Finance & Federal Board of Revenue, Provincial Governments and other cross sectoral stakeholders to develop fiscal incentive schemes such as grants, rebates, tax credits, exemptions and concessions on custom duties or any other fiscal measures to promote localization, production, usage, and compliance of energy efficient products, equipment, services and practices in the country. These incentives shall support the indigenization plans of various sectors of the Government.
- The recurring techno-economic analysis of Harmonized System (HS) codes will be conducted to identify the inefficient products and associated components to penalize their import through tools such as, but not limited to, higher import duties, pre-shipment inspections, etc.

6.9.3 EASY AND EQUITABLE ACCESS TO CAPITAL

Initial capital cost is a potential barrier to energy efficiency investments. An access to capital for initial investments at concessional financing terms shall be a fundamental step to overcome this barrier.

- While Finance Division being the lead, NEECA, State Bank of Pakistan, and multilateral development agencies and the financial sector to develop specific financing instruments for encouraging energy efficiency investments.
- These instruments may include credit products at subsidized interest rates by the banking sector, concessional credit lines such as setting up the revolving loan/guarantee funds and issuance of energy saving certificates to fund these concessional credit lines. SMEs and export oriented industrial sector shall be prioritized in such schemes.

6.9.3.1 ON-BILL FINANCING SCHEMES

On-bill financing is one of effective financial instruments offering the utility consumers to overcome the barrier presented by the high initial costs of energy efficiency measures.

- While Power and Petroleum Division lead, NEECA along with Provincial Designated Agencies shall work with the power & gas sector and water supply/sanitation utilities to establish on-bill financing mechanisms that shall be used to repay investment into energy efficiency measures in the industrial, commercial, public and residential sectors.

6.9.4 FINANCIAL SUSTAINABILITY

NEECA shall take measures for the financial sustainability of its EE&C interventions in the country while being cognizant of the costs associated with the monitoring and enforcement of EE&C as well as investments in the concessional financing facilities. Following targets are set to finance NEECA's operations through, but not limited to:

- Issuance of energy saving certificates and bonds to designated consumers as well as general public
- Defining, fixing and realizing fee (s), rate (s) and charge (s) for rendering any service or providing any facility or information or data audit or assessment or test or certification.
- Defining and fixing an energy efficiency levy on each unit of energy (electricity, gas, oil and coal) sold in the country after a techno-economic analysis.

6.10 ENERGY INFORMATION HOUSE

Data is one major prerequisite for effective energy management and to achieve desired behavior change among masses. It is also crucial for energy planning at national level.

- NEECA shall develop Energy Information House (EIH), for energy information and dissemination, at the Federal and Provincial headquarters in close coordination with its Provincial Designated Agencies and other relevant Energy Sector entities.
- Artificial intelligence, deep machine learning, data mining and internet of things (IOT) shall be implemented on appliances for standards compliance, data collection and other EE&C measures.

EIH shall collect any data that is required for framing policies and doing analysis for energy efficiency & conservation, energy policy development/reformulation, energy planning, long-term energy scenarios, and data driven decision-making across key sectors of the economy. A reliable and sustainable mechanism shall be developed for dissemination of the energy information based on the analyses of the collected data at the national level for all the stakeholders. This information will be used to develop the benchmark for the Energy Use Index (EUI) as well as assess KPIs and direct feedback or evaluation of efficiency measures across the key sectors of the economy.

A data governance policy shall be formulated in consultation with the data owners to enable access to Energy Information House for all relevant public sector stakeholders along with relevant academia, research organizations, and think tanks.

6.10.1 NATIONAL ENERGY EFFICIENCY REGISTRY SYSTEM (NEERS)

NEERS will be a public registry for all energy stakeholders, apart from measuring progress on EE&C initiatives and making informed policy decisions, energy savings from across the country shall be documented, aggregated, exchanged, and traded. NEECA shall develop rigorous registration and robust Quality Assurance/Quality Control (QA/QC) protocols as well as standardized reporting formats for the NEERS.

- The manufacturers and/or importers of electric and gas appliances, products, and equipment shall be registered for compliance towards the mandatory labelling regime for their product lines.
- The testing/enlisted laboratories for appliances and building material shall be registered for accreditation to ensure quality, validity and reliability of testing services locally and internationally.
- The local and international ESCOs shall be registered with in the NEERS as a precondition to operate in the country to ensure quality of services and operations.
- The certified energy auditors and managers shall be registered in the NEERS to ensure transparency and accountability for the quality of services rendered as well as for the reporting mechanism on the EnMS.
- Cloud based mechanism will be developed for surveillance and enforcement through mobile applications.

6.11 SURVEILLANCE AND ENFORCEMENT

NEECA shall develop enforcement mechanisms in its Action Plan, in order to make procedures to prohibit manufacture, sale or import of equipment or appliances which are not energy efficient. Surveillance mechanisms shall be chalked out for the implementation of the rules and regulations to ensure display of the EE&C particulars through labels on equipment or appliances. Following shall be the key components of the enforcement framework:

- NEECA shall design and implement the process to conduct the inquiry or investigation into wasteful use of energy across key sectors of the economy, to fulfil its regulatory mandate.
- Energy consumption thresholds for designated consumers, across the sectors, shall be defined, notified, and monitored.
- Mechanisms for the mandatory energy saving plans along with clear targets and timelines for reduction in the inefficient energy use shall also be developed and inspected in the key sectors especially Power and Gas Utilities to cut their energy losses and improve energy efficiency.
- Operational protocols shall be formulated to summon and enforce to supply any information or document needed for conducting an inquiry or investigation.
- A complaint response and redressal mechanism will be developed to address the issues and problems faced by designated consumers, manufacturer and/or entity regarding the energy efficiency and conservation standards of the products and equipment.
- A clear mechanism for levying fines and penalties on non-compliance shall be developed as a component of the wider enforcement framework.
- NEECA shall direct, coordinate, renew and terminate the services of energy auditors, relevant trainers and energy efficiency inspectors as may be specified by regulations.

6.11.1 MONITORING, REPORTING AND VERIFICATION

NEECA shall establish a system for surveys, monitoring, inspection, and audits to prevent the wasteful or inefficient use of energy resources and recommend implementation of specific energy conservation measures. It is imperative that effective monitoring and implementation of energy efficiency standards be devised. NEECA with support from any relevant body shall carry out the inspection when and where needed.

- NEECA shall direct an initial energy use assessment to be carried out for any upcoming project before commencement.
- NEECA shall develop MRV mechanisms for the designated consumers to monitor their performance on the agreed energy saving plans in collaboration with financial regulatory agencies/divisions/departments/organizations/institutes such as SECP etc.
- NEECA shall develop protocols to conduct spot energy audits/testing for verification of reported performance parameters.

6.12 STRENGTHENING COORDINATION WITH INTERNATIONAL PARTNERS

The role of international partners remained significant in supporting EE&C programs in Pakistan. NEECA has been supported with financial and technical assistance by different donor agencies over the past decade with various key interventions in EE&C sector. This partnership will further be strengthened for EE&C programs in Pakistan. Under the North-South-South Cooperation, collaboration with developing/developed countries will be strengthened for knowledge, technology, and resources mobilization. It will help to align the donor funded projects with national level EE&C targets. This will support Pakistan in reaping the low hanging fruits of EE&C in priority sectors of the economy and to achieve the NDCs targets of the energy sector.

6.13 AWARENESS, EDUCATION, AND CAPACITY BUILDING

NEECA shall conduct awareness sessions, develop technical manuals, educational curriculum/courses related to EE&C and hold competitions and national awards to acknowledge and boost energy efficiency activities in the country. Specialized awareness raising programs shall be developed for different audiences including operational staff, engineering staff and senior management etc. Awareness and education will be imparted in local/ regional languages at grass root level and awareness-raising sessions at educational institutions. The following interventions will be designed and implemented by 2026:

- NEECA shall develop different mobile applications, webpages, and registries for fast communication and for maximum outreach. NEECA shall develop a comprehensive social media strategy and communication plans to disseminate information related to different energy efficiency initiatives.
- NEECA in partnership with the Higher Education Commission (HEC) of Pakistan will integrate the curriculum, courses, and training programs on EE&C at university level.

- Courses in Energy Auditing, Social Sciences, Policy and Management etc, shall be introduced in all relevant disciplines and chapters shall be added into the curriculum of educational institutions.
- The polytechnic institutes will be targeted to educate the associate engineers.
- School awareness campaigns will be launched to sensitize the children about the significance of EE&C measures.
- Energy Conservation Day will be celebrated every year at national level

NEECA shall take appropriate institutional development and capacity building measures for effective implementation of the provisions of the Act. Academia-industry linkages shall be developed to boost research and information dissemination regarding new technologies and techniques for EE&C gains.

- The industrial assessment centers will be developed in collaboration with universities in the industrial hubs of the country.
- The liaison will be developed and strengthened with chambers of commerce and industrial associations for directing CSR budget for EE&C.
- NEECA shall arrange, conduct, and monitor the training of relevant professionals for their performance as energy auditors or managers.
- Encouraging the culture of vehicle free weekends, even/odd vehicle days, and day light savings.

6.14 INNOVATION, RESEARCH & DEVELOPMENT

NEECA shall conduct and initiate the research, development programs and demonstration projects in support of its functions.

- NEECA will conduct research and introduce innovative solution to set benchmark for energy consumption at a certain facility, Investment requirement for efficient equipment, alter the list of energy intensive industries, establishing energy consumption norms, criteria for designated consumers, setting the energy standards and recommending preferential use of energy.
- Assessment and benchmarking of energy footprint KPIs and KRIs for energy intensive industrial sectors

6.15 GENDER MAINSTREAMING IN ENERGY EFFICIENCY & CONSERVATION

The energy efficiency and conservation interventions shall be gender focused by assessing the implications for women and men of any planned action, policies, regulatory measures, and programs, in all areas and at all levels. NEECA shall ensure the participation of all genders in all its policies, projects, and initiatives.

NEECA will devise women focused capacity and awareness raising strategy for broader EE&C gains at household level as the women spend maximum hours of a day at home. Further, women have

central role in decision making for the purchase and use of home appliances. It is therefore, NEECA will ensure the implementation of women-focused EE&C awareness and sensitization Initiatives in print and digital media.

6.16 COORDINATION MECHANISMS WITH PROVINCIAL GOVERNMENTS & OTHER STAKEHOLDERS

NEECA has a mandate to improve energy efficiency nationwide. However, the 18th Constitutional amendment has devolved the authority and powers for legislation to provinces as well. The legal status of provincial energy efficiency agencies/departments and their functions need to be considered for the smooth implementation of energy efficiency. NEECA shall develop mechanisms for liaison with provincial governments for the establishment of its provincial designated agencies. NEECA shall provide the necessary support to its provincial designated agencies for their operationalization as per the NEEC Act 2016.

7 POLICY IMPLEMENTATION FRAMEWORK

7.1 ACTION PLAN

- NEECA shall develop an all-inclusive national EE&C Action Plan (2023-2030) based on the programs identified in policy interventions for key strategic sectors of the economy and in consultation with the sectoral and cross sectoral stakeholders.
- NEECA Board shall formulate a National EE&C Implementation Committee comprising of federal and provincial public departments along with private sector representing key sectors of the economy.
- NEECA shall conduct a national level study to define and draw KPIs, ToRs, and coordination mechanisms for/between all stakeholders for policy implementation and to inform the National EE&C Action Plan.
- Short- and medium-term sectoral actions/programs (medium, and long term) will be devised to ensure systematic implementation of planned activities on a case-to-case basis in collaboration with federal & provincial government entities, donor agencies, international development partners & financial institutions and relevant private sector stakeholders.
- Under the longer-term policy horizon and in light of the full mainstreaming and integration of energy efficiency & conservation within the nation's energy planning, a seven (07) year Action Plan will be developed and integrated with relevant cross sectoral policies and plans.
- The Action Plan 2023-30 will be aligned to integrated energy plan of Pakistan, Sustainable Energy for ALL- National Action Plan for 2030 and National Electricity Policy & Plan 2021.
- NEECA shall support the custodians of sectoral policies in developing their respective EE&C action plans, ensuring their alignment with the national EE&C goals and targets set in the EE&C Action Plan.

7.2 EVALUATION, ACCOUNTABILITY, AND LEARNING

- Transparency, the accuracy of the information, innovation, and replication of best practices shall be an overarching strategy for the development of energy efficiency and conservation sector in Pakistan.
- To ensure effective implementation of the energy efficiency regimes in Pakistan, NEECA shall develop specific review and evaluation mechanisms for each thematic area along with resource management, impacts & results and cost & benefit analysis.
- The outcome of such review/s and evaluation will help to amend/review and update the programs/interventions/plans to achieve energy efficiency targets at national level.
- The progress will be tracked through a well-articulated Monitoring, Evaluation & Learning (MEL) framework.
- Knowledge management shall be developed to produce periodical reports and objective documentation procedures for learning, knowledge management, and institutional growth.

7.3 AMENDMENTS, REVISIONS AND UPDATING

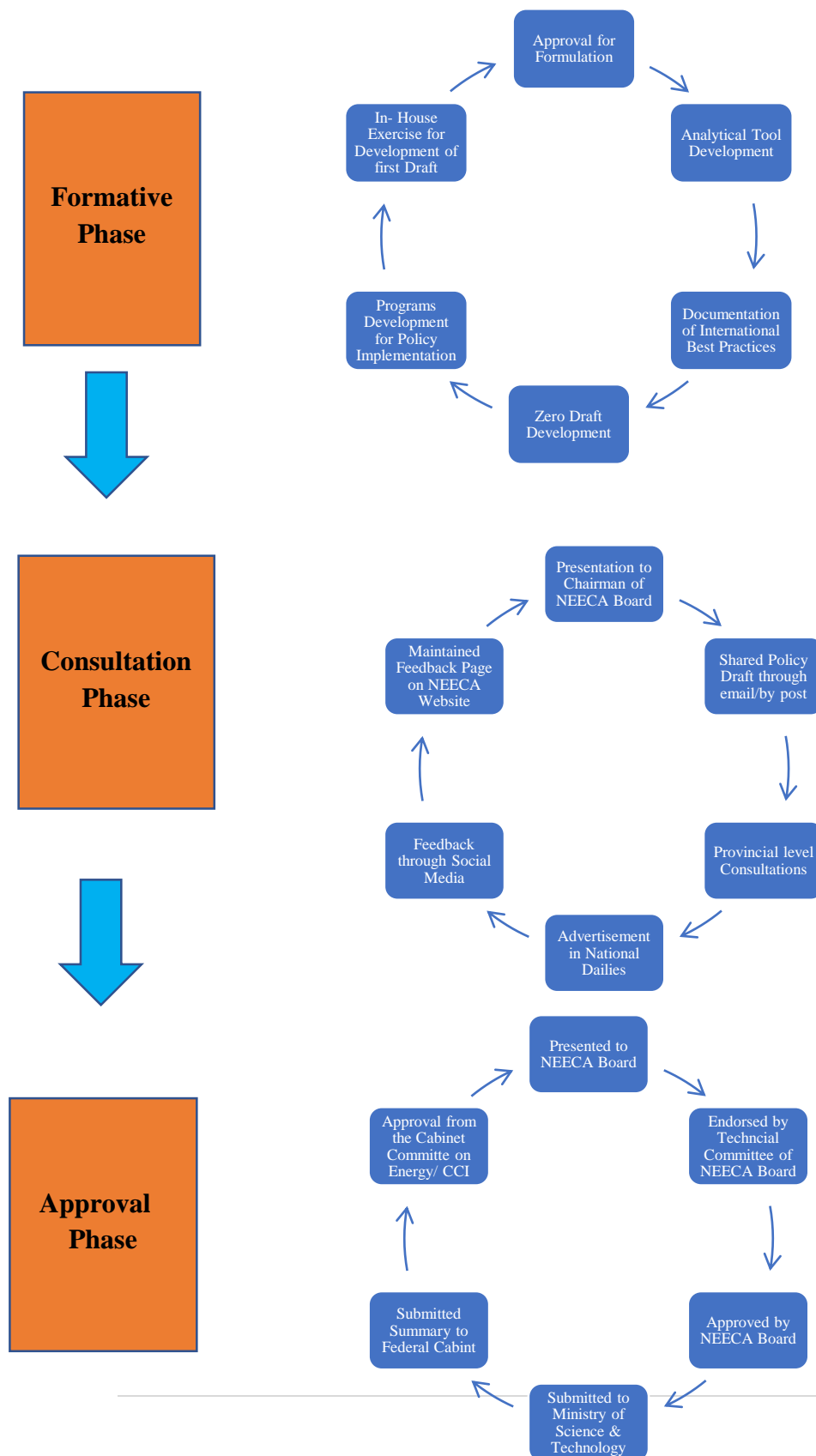
- The National Energy Efficiency & Conservation (NEEC) Policy 2023 shall come into force immediately after its approval from the appropriate forum and the National Energy Conservation Policy 2006 will be superseded. The NEEC Policy shall remain effective until any other policy framework is prescribed by the Government of Pakistan.
- The Government, on its own motion or on the request of the provincial government, may review and propose revisions/amendments in the National Energy Efficiency & Conservation Policy 2023 from time to time. However, NEEC Policy will be reviewed at least once after every three years while the National EE&C Action Plan will be subject to an annual review.

APPENDIX – I DEFINITIONS

- i. "Accredited Laboratory" means a local laboratory designated by the Authority or the Provincial Government with concurrence of NEECA and duly accredited by the National Accreditation Body; or an international laboratory designated by the Authority to carry out such procedures and tests as are necessary for furtherance of the purposes of this Policy.
- ii. "Agriculture Sector" means activities or practices related to soil management. land preparation (tillage, ploughing etc.), harvesting, threshing, mechanized livestock and agriculture farming, livestock and agriculture farm irrigation and drainage, tube-well land boring, livestock and agriculture farm management, livestock and agriculture farm produce transportation, agrochemicals management, livestock, plant and agriculture food processing, preservation and value addition, bio-mass recycling, rangeland and forest management, livestock and poultry management, post-harvest output management:
- iii. "Authority" means the National Energy Efficiency and Conservation Authority established under section 6 of the NEEC Act 2016;
- iv. "Buildings Sector" means all buildings including private domestic household, commercial, industrial, public and community buildings;
- v. "Certified Energy Auditor" means any person to be certified and designated by the Authority for carrying out energy audit in accordance with the provisions of the NEEC Act 2016;
- vi. "Demand-side management (DSM)" means the planning, implementation and monitoring of those utility activities designed to influence customer use of energy in ways that will produce desired changes in the utility's load shape i.e., changes in the pattern and management of a utility's load;
- vii. "Designated Agency" means an agency designated as such by the NEECA Board established under Section 3 of the NEEC Act 2016 or a Provincial Government;
- viii. "Designated Consumer" means a consumer designated as such by the Authority;
- ix. "Efficiency" means the ratio of energy output to energy input in respect of energy consuming equipment, appliances or systems;
- x. "Energy" means conventional and non-conventional, alternate sources of energy including petroleum, coal, natural gas, liquefied petroleum gas or compressed natural gas and electrical energy and may also include such other new or renewable forms of energy as the NEECA Board may, by notification in the official Gazette, specify;
- xi. "Energy Audit" means an examination of any energy consuming project about the way the energy is generated, transmitted, distributed, or used there and identification of areas where energy waste can occur for improving energy efficiency and where scope for improving energy use efficiency may be possible;
- xii. "Energy Conservation" means reduction in energy consumption by minimizing waste, of curtailment of energy use or improving generation, transmission, distribution or end use

- energy efficiency to avoid waste, creating additional energy supply at source and effecting a reduction of undesirable emissions to the atmosphere or air due to better fuel combustion;
- xiii. "Energy Conservation Tribunal" means the Tribunal constituted under Section 19 of the NEEC Act 2016; xiv. "Energy Intensity" means the amount of energy used to produce a given level of output or activity;
- xv. "Energy Waste" means amount of energy that remains unused or discarded due to incomplete burning or combustion or due to use of inefficient energy consuming equipment, appliance or due to process or inefficient operation, maintenance and management of a system;
- xvi. "Government" means the Federal Government or, as the case may be, a Provincial Government; xvii. "Industrial Sector" means small scale, medium scale and large-scale industry involving manufacturing, making, formulating, altering, repairing, finishing, packing or otherwise treating any article or substance with a view to its use, sale, transport, delivery or disposal;
- xviii. "Pollution" means contamination of air, land or water due to discharge of pollutants as a consequence of incomplete or inefficient combustion of energy resources that alters unfavourably the chemical, physical, biological, radiation, thermal, radiological or aesthetic properties of air, water or atmosphere;
- xix. "Power Sector" means generation, transmission, and distribution system of electricity; xx. "Reduced Energy Intensity" means using less energy to produce a product or provide a service;
- xxi. "Regulations" means the regulations made under the NEEC Act 2016 with the guidance of this Policy;
- xxii. "Rules" means the rules made under the NEEC Act 2016;
- xxiii. "Sectors of Economy" include but not limited to power sector, industrial sector, transport sector, agriculture sector and the buildings sector;
- xxiv. "Standards" means numeric values for optimum level of energy units required to produce a unit of output or desirable energy efficiency levels assigned to any process, object, equipment or appliance either for general applicability or for specific application established under the provisions of the NEEC Act 2016; and
- xxv. "Transport Sector" means road transport, railways, aviation, and such other means of transportation as the NEECA Board may determine.

APPENDIX – II POLICY FORMULATION PROCESS



NEECA Board approved the formulation of NEEC Policy in March 2018. However, formal policy formulation process initiated in January 2020 and first draft was completed in November 2021.

Consultation process started in December 2021 where policy draft shared with more than 200 stakeholders, provincial level Consultations were conducted in 08 Cities with a total number of 438 participants, advertised in all national dailies and NEECA's social media pages. A comments matrix was developed with documentation of response against each comment.

A summary of the NEEC Policy was submitted to Federal Cabinet through Ministry of Science & Technology. Policy will be submitted for CCI after approval of the Cabinet Committee on Energy (CCOE).

APPENDIX – III SECTORAL POLICIES

The policy statement for integration of EE&C in different sectoral policies should be incorporated from time to time, but not limited to:

- a) Agriculture and Food Security Policy
- b) Alternate and Renewable Energy Policy 2021
- c) Auto Industry Development and Export Policy 2021
- d) Climate Change Policy 2012/ Revised 2021
- e) Federal Board of Revenues- Tax and Customs Rules/ Regulations/ SROs
- f) National Education Policy, 2021
- g) National Gender Policy Framework 2022
- h) National Housing Policy 2001
- i) National Industrial Policy
- j) National Science, Innovation and Technology Policy 2021
- k) National SME Policy 2021
- l) National Start-Up policy 2021
- m) Natural Gas Allocation and Management Policy 2005
- n) NEPRA Rules and Regulations
- o) OGRA Rules, Regulations & Standards and Federal Government's Petroleum Policies
- p) Pakistan National Quality Policy 2021
- q) Power Generation Policy 2015 (or any policies approved from time to time)
- r) Provincial Industrial Policies
- s) Provincial Procurement Policies and Rules
- t) Public Procurement Rules
- u) State Bank of Pakistan's Green Banking Guidelines (GBG)
- v) National Water Policy 2018
- w) The Boilers and Pressure Vessels Ordinance 2002/ The Boiler Act 1923