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ENERGY SECURITY OF BANGLADESH

Strategic Actions Urgent To Address Challenges

1. Introduction:

Energy is defined as the ability to do work. Without energy, no work is possible. The physics concept of energy applies directly to the human body. The human body uses energy from food to sustain life and perform various activities, ranging from physical movement to mental processes like dreaming and emotion.

Just as the human body needs good food for energy, a nation's economy and social structure depend on a steady supply of power. Without energy, a country cannot meet basic needs like food, housing, healthcare, and education. This connection between energy and economics has always been true, and it always will be.

Access to an uninterrupted, affordable, and sustainable energy supply is the bedrock of modern society. It is essential to improve living standards, create opportunities for new businesses and industries, attract foreign investment, and enable sustainable development in a nation like Bangladesh. Declining energy self-sufficiency leaves a nation vulnerable to supply chain disruptions, geopolitical tensions, social unrest, and stunted development, all of which

directly undermine domestic economic stability and sovereignty. Because this represents a critical non-traditional threat to national security, countries with limited energy resources and underdeveloped economies must prioritize energy security to protect national stability and economies. The International Energy Agency (IEA) defines energy security by four As: Availability, Accessibility, Affordability, and Acceptability.

Global energy systems rely on the First Law of Thermodynamics. According to this law, the total amount of energy in the universe is constant. We cannot create new energy; we can only transform it. The vast amount of energy currently generated worldwide by burning fossil fuels (coal, oil, and gas) is essentially just the transformation of chemical energy stored underground for millions of years. Fossil fuel reserves are limited and depleting. Moreover, the processes involved in their conversion cause severe environmental damage. Despite fossil fuels currently dominating the energy mix, this foundational physics principle dictates that long-term security requires a global shift toward new energy flows and improved energy efficiency. This reality also applies to the declining natural gas reserves of Bangladesh.

A modern, diversified, and optimal energy mix for power generation includes renewables, flexible natural gas as a bridge fuel, limited coal (with carbon capture if needed), and proven high-efficiency options like nuclear power for a stable baseload. It also incorporates emerging technologies such as small modular reactors (SMRs) and green hydrogen. This strategy is known as the diversified low-carbon portfolio approach.

The transformation of the national energy system into a modernized sector depends on population dynamics, geography, existing infrastructure, resource availability, societal conditions, and long-term strategies for economic growth, social equity, environmental protection, and sustainability.

Our country, Bangladesh, is a densely populated developing nation. Our nation is standing at a dangerous crossroads in its energy journey due to the rapid depletion of domestic natural gas, rising reliance on costly imported fossil fuels, and volatile global supply shocks. The country urgently needs a diversified energy mix to enhance energy security. Achieving this requires accelerated deployment of renewables, exploration of natural resources, early commercial production of the 2400 MW Rooppur NPP, and the expansion of baseload nuclear energy, alongside critical structural reforms in governance, infrastructure, and policy frameworks.

2. Current Picture of Energy and Power Sectors of Bangladesh

Bangladesh relies heavily on a fossil-fuel-dependent energy mix. This includes declining domestic gas, imported Liquefied Natural Gas (LNG), imported coal (which recently surpassed gas), limited domestic coal, imported Heavy Fuel Oil (HFO) and High-Speed Diesel (HSD), cross-border electricity imports, and a small share of grid renewables and off-grid solar. The country also uses a significant quantity of LPG.

The power sector of the country is heavily reliant on fossil fuels. Approximately 92.33% of the total capacity still relies on gas, coal, and liquid fuels (HFO/HSD). Most of the infrastructure is built based on fossil fuel imports. This situation poses a major challenge for Bangladesh's power generation sector and creates significant

economic and environmental risks. Excessive reliance on fuel imports leads to price hikes in the global market and places immense pressure on foreign currency reserves. Widespread load-shedding is taking place across the country due to the fuel crisis.

According to the latest database of the Bangladesh Power Development Board (BPDB) from September 2026, the country's total grid-based power generation capacity is approximately 29,595 MW (including off-grid systems, it reaches approximately 32,332 MW). Fuel-based power generation capacity (September 2026) includes: Natural gas (/LNG) - 12154 MW (42.21%), coal- 8,423 MW (28.46%), HFO - 5,641 MW (19.06%), HSD- 768 MW (2.60%), Solar: 797 MW (2.69%), hydro - 230 MW (0.80 % MW), Wind - 62 MW (0.22 %), Power import - 1160 MW (4.03 %) and others - 40 MW (0.14 %).

The peak electricity demand fluctuates considerably between working hours and evening surges, ranging from a daytime expectation of 15,520 MW to an evening peak of 17,200 MW.

Natural gas has long been the backbone of Bangladesh's energy system. It is widely used for (i) power generation, (ii) fertilizer production, (iii) other industries including textiles, glass and ceramics, (iv) captive power, (v) domestic uses, (vi) commercial activities and (vii) transportation (CNG).

Bangladesh is currently facing a severe structural gas crisis, stemming from a long-standing lack of domestic exploration activities and the failure to discover any new, commercially viable gas fields. While the country's own natural gas production is declining at an annual rate of approximately 5%, the demand for gas is rising by 4% each year. The compounding effect of this declining production and rising demand creates a rapid, unsustainable widening of the energy deficit, resulting in a final gas crisis for the nation. To overcome this crisis and meet growing demand, the country is increasingly relying on imported LNG. However, the LNG import process is severely hampered by infrastructural limitations and "single-point vulnerability," as the country's two operational Floating Storage

and Regasification Units (FSRUs) are anchored in the same offshore zone at Moheshkhali, Cox's Bazar.

Presently, national gas demand fluctuates in the range between 3,800 and 4,000+ mmcf, but the net supply from combined domestic output and imported Liquefied Natural Gas (LNG) is roughly 2,610-2,800 mmcf. The daily deficit is about 1,000- 1,300+ mmcf. The severe gas shortage in Bangladesh creates a complex domino effect across the country's main economic sectors and daily citizen welfare.

1. **Power Generation:** Bangladesh has a grid-based natural gas power generation capacity of approximately 12,472 MW, alongside about 3,460 MW of gas-based off-grid/captive power capacity used mostly by industries. Nearly 50% of gas-based power plants sit completely idle or operate well below capacity, putting over 20 billion USD in infrastructure at risk of becoming stranded assets.
2. **Agriculture Support:** Gas shortages have heavily impacted fertilizer production, leading to the temporary suspension of several state-owned and private fertilizer factories. Shutdowns at domestic fertilizer factories force the government to spend over \$800 million annually on imports to protect crop yields.
3. **Ready-Made Garments (RMG) & Textiles:** Major textile and garment export factories report production dropping by up to 50% due to fluctuating gas pressure. This delays shipping deadlines, incurs expensive air-freight penalties, and damages relationships with global brands.
4. **Transmission Network:** Bangladesh's modern gas transmission infrastructure is severely underutilized due to a critical supply-demand gap. Underutilization of modern pipeline infrastructure effectively traps about 2 billion USD in idle capital.
5. **Public Transportation:** Chronic low pressure at CNG stations creates massive, time-wasting vehicle queues across major highways.
6. **Domestic Households:** Urban residents face severe daily disruptions, with prolonged daylight gas outages making routine cooking nearly impossible in cities like Dhaka.

To unlock \$30 billion in gas-based infrastructure value while safeguarding the nation's economic engine, the present government has adopted strategies for aggressive domestic exploration to boost domestic gas production, established LNG import and storage infrastructure for sustaining imports by expanding from both long-term and spot market sources rather than relying on any single country or region, and implemented emergency demand management to maintain uninterrupted connectivity for economically critical infrastructure and industrial sectors.

Bangladesh is currently using Liquefied Petroleum Gas (LPG) in the residential and transport sectors to address natural gas shortages. Since domestic production is extremely limited, the country relies on imports for almost its entire LPG demand. Rising international LPG prices directly affect household energy affordability, disproportionately impacting lower-income groups. Initiatives to produce LPG from domestic gas fields are necessary.

Bangladesh's energy mix increasingly relies on imported coal as shifting policies and depleting reserves have sidelined indigenous sources. The 525 MW Barapukuria Thermal Power Plant is the sole facility designed to utilize indigenous coal. Most of the nation's 8,000+ MW coal capacity runs on imported coal. Due to the failure to increase coal extraction from domestic mines and by shifting toward an import-dependent coal model, the country has exposed its power sector to international volatility. Delays in international deliveries have caused capacity shortfalls, contributing to rolling load-shedding during peak summer demand periods. Moreover, most of these plants are strategically situated along the coastline. This makes the energy sector highly vulnerable to geographical & climate risks. These centers face climate-related risks such as cyclones originating in the Bay of Bengal, storm surges, and rising sea levels. If coal unloading at the port is disrupted by a disaster, the country's entire power supply network could face a crisis.

Bangladesh is a mineral-rich country based primarily on five discovered coal mines, with total in-situ reserves of approximately 2,000 to 3,000 million

tonnes. The proven reserve amounts to about 1,000 million tonnes. While domestic coal shields the country from dollar shortages and global shipping issues, depleting reserves and political/environmental resistance to opening new open-cast mines have severely limited the expansion of indigenous coal power. The government has adopted a plan to expand the Barapukuria mine and extract roughly 160 million tonnes of coal between 2031 and 2035. Bangladesh must adopt long-term and environmentally friendly strategies regarding other potential mines alongside Barapukuria.

Oil and petroleum products play a crucial role, especially in the transport and power sectors, and remain significant in the energy mix of the country. Over the years, oil-fired generation has increased significantly. The total installed power generation capacity based on HFO and HSD in Bangladesh is 6,409 MW combined (5,641 MW from HFO and 768 MW from HSD). Liquid fuels, including HFO and HSD, run peaking power plants to meet emergency grid demands, which costs the state billions in imports and operational subsidies. For energy security, Bangladesh must urgently reduce its heavy reliance on imported oil and oil products by shifting from oil-fired power generation to clean energy technologies.

Renewable energy (sunlight, wind, water, biomass, biogas, etc.) refers to net-zero carbon energy produced from natural resources. Bangladesh is far behind in terms of the commercial use of renewable energy. The contribution of renewable sources to the country's total electricity generation is relatively small. Non-agricultural land, underutilized areas, and urban rooftops are being considered for potential solar projects. The country's hydro-potential is very limited.

The government aims to significantly increase its renewable energy share, targeting solar, rooftop solar, and wind energy. As of September 2026, Bangladesh has initiated its National Renewable Energy Development Strategy 2026–2030, establishing a target to generate 20% of its electricity from renewable sources by 2030. The target has been set to generate a total of 10,000 MW of solar power, with 5,500 MW coming from rooftop solar and 4,500 MW from ground-mounted solar.

Additionally, the plan aims to generate another 450 to 550 MW of electricity from other renewable sources, including wind, waste-to-energy, hydropower, floating solar, and agrivoltaics. Ambitious targets and strategies for the use of renewable energy by 2040 and 2050 have been set to ensure Bangladesh's long-term energy security.

Alongside renewable energy expansion, Bangladesh must set a target of reducing fossil fuel imports through the early production of roughly 2,400 MW from the Rooppur NPP, the expansion of large NPPs, and the introduction of Small Modular Reactors (SMRs) for uninterrupted baseload power supply. For Bangladesh, one of the world's most climate-vulnerable countries, the nuclear and renewable energy strategy represents a critical step toward reducing emissions while protecting economic growth and strengthening resilience against climate impacts.

3. Energy Security of Bangladesh: Issues & Challenges and Actions & Strategies

We, Bangladeshis are living through many energy security threats. The country is facing a severe energy crisis due to rapid depletion of proven domestic gas resources, historic underinvestment in exploration for discoveries, unmined domestic coal, slow adaptation of renewables, unclear vision of nuclear adaptation, and overreliance on fossil fuel imports.

The current issues and threats to national energy security and recommended actionable strategies are proposed below.

Issue 1: Rapid depletion of the proven domestic natural gas reserves and historic underinvestment, lack of aggressive and sustained domestic gas exploration, mainly offshore for new discoveries.

Actions: Invitation for international bids (Bidding Round) for offshore (deep and shallow sea) and onshore (land-based) exploration.

Modernization of the Model PSC (Production Sharing Contract).

Deep exploration onshore.

Completing rapidly deep-sea multi-client 2D/3D seismic surveys and presenting

the data to international companies to encourage them to participate in the bidding process.

Issue 2: Slow renewable adaptation due to financial barriers and incentive bottlenecks for large-scale solar projects and wind projects, high import costs and heavy duties on essential solar components, inconsistent tariff structures and pricing models, lack of large-scale open land near cities or major load centers, grid limitations, and limited private equity and FDI.

Actions: Rooftop & Decentralized Solar: Adopting decentralized rooftop solar installations; implementing the Fast-Track Rooftop Solar Program targeting 3,000 to 4,000 MW of rooftop solar before summer 2027 and 5,500 MW by 2030.

Implementing the Public Institution Solar PPP programme at 46,000 Schools, hospitals, and government offices, targeting 1,454 MW before summer 2027.

Installing smaller grid-tied installations on unused public infrastructure and power plants to prevent delays from land acquisition issues.

Policy Reform & Financing: Setting legal targets for renewable energy, accompanied by transparent tariffs and specific strategies, and encouraging the private sector through multilateral and climate finance programs.

Land & Resource Mapping: Fast-tracking nationwide land mapping to identify unused government land/khas land, riverbanks, and coastal areas suited for utility-scale solar, and fast-track wind resource mapping in high-velocity coastal zones.

Creating national infrastructure to generate at least 30% of its electricity from renewable sources by 2040 and more than 50% by 2050 by attracting private investment.

Grid Upgradation: Allocating fast-track priority funding to upgrade national transmission infrastructure and battery storage integration, allowing the grid to absorb intermittent renewable energy.

Issue 3: Non-utilization of domestic

reserves of coal due to government policy hesitations and debates over mining methods.

Action: Formulating a swift and transparent coal policy or framework. Increasing the generation of indigenous coal base-load electricity (which ensures uninterrupted power supply) through the extraction of domestic coal, thereby reducing reliance on imports.

Issue 4.1 : Premature, rapid investments in natural gas, coal and liquid fuel plants have led to massive overcapacity and severe underutilization.

Issue 4.2 : The existence of a significant portion of generation capacity consisting of old, inefficient, outdated oil and gas plants, combined with aging transmission/distribution infrastructure, has resulted in energy security risks for the country. This results in frequent outages, high system losses (technical and non-technical losses >10-15%), and high generation costs, threatening reliability despite having surplus generation capacity.

Issue 4.3 : Reliance on imported LNG, coal, and oil has led to an 83% increase in electricity generation costs.

Issue 4.4 : Absence of a quality supply chain risk management approach to mitigating the impact of sudden fossil fuel import stoppages. This causes severe energy insecurity, frequent power outages, and economic volatility.

Action: Addressing Issues 4.1 and 4.2 requires the rapid phase-out of old, inefficient oil-, gas-, and coal-fired power plants, modernizing transmission and distribution lines, and reducing the burden of capacity charges by cutting down on unnecessary overcapacity.

To address Issue 4.3, reliance on fossil fuel imports must be gradually reduced through a transition to modern and eco-friendly energy technologies by increasing the use of modern technologies such as solar and wind power.

To address Issue 4.4 for coal imports: increasing the country's strategic fuel reserve from 90 days to 120 days to mitigate the risk of a sudden supply disruption.

To address Issue 4.4 for LNG imports: developing advanced sea- and river-based LNG infrastructure utilizing virtual pipelines to deliver gas directly to load centers.

Issue 5.1 : The historical lack of diverse strategic alliances and long-term contracts with primary energy suppliers has exposed the nation to severe supply shortages and inflated costs.

Issue 5.2 : Heavy reliance on imported fossil fuels (LNG and coal) from a narrow geographic pool exposes the country to volatile shipping lanes and geopolitical shocks.

Actions: To address Issue 5.1, it is necessary to balance competitive long-term and short-term contracts, including direct government-to-government (G2G) agreements. Emphasis must be given to locking in predictable pricing and volume guarantees and reducing spot-market exposure by maintaining a portfolio of 70% long-term G2G contracts for baseload stability and 30% flexible short-term/spot contracts to capitalize on market dips.

To address Issue 5.2, it is inevitable to adopt concrete policy frameworks for geographical diversification. Multi-region sourcing and diverse shipping routes. In addition, a policy framework on establishing joint energy task forces via signed Memorandums of Understanding (MoUs) to secure diplomatic priority during global energy crunches is necessary.

Issue 6: Bangladesh can significantly reduce its dependence on imports by increasing the production of Liquefied Petroleum Gas (LPG) from gas fields and condensate. Currently, the annual demand for LPG in Bangladesh is approximately 1.5 million metric tonnes (MT), a significant portion of which must be imported from abroad at a high cost, placing a heavy burden on the country's economy.

Actions: Promptly conducting the necessary technical and economic surveys at the country's major gas fields to determine which gas fields contain adequate reserves of propane and butane.

Setting up propane and butane fractionation plants at major gas fields in the shortest possible time.

Maximizing the utilization of condensate obtained from the country's refineries and gas fields to convert it into LPG.

Distribution with Government Support: Strengthening government-level distribution networks and subsidy policies to supply LPG at affordable prices to remote areas and the transport sector (Autogas).

Issue 7 : Despite the vast gas reserves in the Bhola gas fields (Shahbazzpur, Bhola North, and Ilisha), industrial zones on the mainland are unable to fully reap the benefits due to the lack of a permanent pipeline and protracted delays.

Actions: 1. CNG/LNG Transportation (Short-term):

Transporting CNG/LNG cascade cylinders to the mainland using specialized barges or large vessels. Utilizing the PPP model to expedite the establishment of CNG conversion stations and the implementation of transport operations.

2. Pipeline connection to the national grid (long-term):

Accelerating the pipeline project as a long-term solution for permanently connecting Bhola's gas to the main national grid using modern 'HDD' (Horizontal Directional Drilling) technology to avoid the complexities of crossing the Meghna River.

3. On-site use in Bhola (alternative strategy):

Fertilizer factories and power plants: Even if gas cannot be transported to industrial zones, the produced fertilizer and electricity can easily be sent to the mainland via river routes or grid lines.

Economic Zone: Establishing a Special Economic Zone (EZ) in Bhola and providing direct gas connections to gas-dependent industrial units located there.

Issue 8: Without rigorous analysis of geopolitical risks, the development of the energy and power sector leaves the country vulnerable to severe energy security risks. Ignoring these external factors exposes critical infrastructure to supply disruptions, price shocks, and strategic coercion from foreign powers.

Actions: Diversifying the energy mix to reduce import dependency, accelerating investments in domestic and industrial renewable energy, and ramping up indigenous offshore gas exploration.

Installing solar power systems on factory rooftops directly to protect the industry from grid failures and price hikes in the international market.

Expediting offshore gas exploration.

Issue 9: Climate change poses a severe threat to Bangladesh's energy security. Rising ambient heat drops power plant efficiency and strains transformers, while extreme weather and rising sea levels endanger vulnerable coastal stations, which provide roughly 30% of the nation's generation capacity.

Action: Expanding distributed solar and biomass energy systems helps coastal and rural communities withstand grid failures from central power stations.

Upgrading transmission grids, modernizing coastal substations to be flood-resistant, and implementing smart-grid monitoring can minimize energy disruptions during severe weather.

Issue 10: Reliance on a centralized, old national grid infrastructure creates severe operational and financial strain and causes significant challenges with peak demand management, frequent outages, high system losses (technical and non-technical losses >10-15%), and high generation costs.

Action: Transitioning from an analog system to an automated and modernized electric grid system and electricity distribution networks by deploying SCADA (Supervisory Control and Data Acquisition) and Prepaid Smart Meters across distribution networks helps immediately track and reduce losses and improve power supply.

Replacing degrading overhead lines with underground cables in dense urban load centers (like Dhaka) reduces technical losses and prevents outages caused by adverse weather or line faults.

Encouraging the expansion of Rooftop Solar and Net Metering for industrial,

commercial, and urban residential zones alleviates peak grid stress and limits long-distance transmission losses.

Utilizing Battery Energy Storage Systems (BESS) balances intermittent generation and provides dispatchable power during sudden spikes in demand, preventing localized blackouts.

Lessening reliance on expensive, imported fossil fuels (LNG and coal) protects the grid against global supply shocks and foreign exchange volatility.

Issue 11: Lack of strong and long-term bilateral diplomacy and strategic alliances with regional cross-border partnerships and also international suppliers has exposed Bangladesh's structural vulnerabilities in energy security. Today's energy diplomacy is characterized by the challenge of managing the traditional geopolitics of fossil fuels while simultaneously navigating the emerging geopolitics that accompany the modern and green transition.

Actions: Pursuing both strategic bilateral agreements and regional cross-border partnerships to diversify its primary energy mix.

Collaborating to leverage cross-border partnerships to clean hydropower potential.

Seeking energy collaborations in Southeast Asian nations.

Enabling national energy diplomacy to negotiate trade routes and build strategic alliances to ensure the continuous, reliable, and affordable flow of power resources while balancing national security and economic prosperity.

Issue 12: Unclear Long-Term Policy Vision and Strategic Partnerships in Nuclear Power

Due to the limitations of coal, gas, and hydroelectric power, nuclear energy is the only long-term 'baseload' (continuous) source for Bangladesh. However, an unclear long-term policy vision severely limits the potential of the country's nuclear sector. Due to the lack of long-term and specific policies, foreign financiers and technology partners hesitate to make large

investments. Furthermore, developing nuclear engineers and scientists for the long term is hindered in the absence of a clear roadmap.

Because a civil nuclear programme ties a nation to foreign vendors backed by technology holder nations for decades, robust nuclear diplomacy and strategic partnership are essential to secure technology transfers, supply chains and nuclear infrastructural support for an NPP facility's 60- to 100-year lifecycle.

Actions: These proposed measures are highly timely and specific for the long-term development of Bangladesh's nuclear power sector, the successful implementation of the Rooppur project, and the elimination of policy uncertainties.

Rapid and safe implementation of the 2,400 MW Rooppur Nuclear Power Plant:

Expediting the commissioning and grid synchronization of two units of the 2,400 MW Rooppur NPP.

Enhancing the capacity and stability of the national grid (high-voltage grid) for the safe transmission of electricity generated at Rooppur NPP.

Monitoring and implementing the bilateral agreement with Russia regarding the safe management of spent nuclear fuel.

Clarification of long-term nuclear policy and vision:

Formulating a 'Nuclear Energy Roadmap' that defines the contribution of nuclear energy in alignment with the country's 2050 net-zero target.

Adopting a long-term fixed strategic capacity target of 2,400 MW by 2030, 5,000 MW by 2040, and 9,000 MW by 2050 to match rapid industrialization.

Establish a dedicated regulatory cell to shield international investors from administrative complexities and overlapping jurisdictions.

Initiating the preliminary work for the construction of two additional units (3rd and 4th) by utilizing the existing infrastructure at Rooppur would reduce both costs and time.

Determining Future Reactor Technology (Large-Scale & SMRs):

Assessing the feasibility of SMR technology for integration in Industrial hubs & high-demand zones, Export Processing Zones (EPZs), Coastal areas, and Off-Grid and remote areas, and rapidly incorporating it into policy frameworks for integration. Finalizing the site selection and technical feasibility assessment for the second large-scale nuclear power plant in the country.

Human Capital & Institutional Capacity Building:

Formulating a specific 'Human Resource Development Roadmap' is crucial for the long-term success of Bangladesh's nuclear energy program and for the safe and efficient operation of the Rooppur NPP.

Strengthen the Bangladesh Atomic Energy Regulatory Authority (BAERA) for independent safety oversight by regularly updating national nuclear safety and security guidelines in alignment with IAEA safety standards and developing internationally qualified regulatory inspectors for the inspection and licensing processes of nuclear power plants.

Capacity building of Bangladesh Atomic Energy Commission (BAEC) as a technical support organization (TSO) to the national nuclear power programme and enhancing the capacity of the BAEC by modernization of BAEC laboratories for radioactivity measurement, waste management and environmental monitoring, nuclear research reactor facilities, and also implementing a 'Knowledge Management System' to document the knowledge and experience of seasoned scientists and transfer it to young scientists.

Developing the management and technical skills of the personnel of Nuclear Power Plant Company Bangladesh Limited (NPCBL) for operation and maintenance of Rooppur NPP independently and also fostering a 'Safety First' mindset and organizational culture among officials and employees at all levels of the NPCBL.

Robust Nuclear Diplomacy & Lifecycle Security:

Assurance of Spare parts and critical components supply and operational support: Securing a legal agreement with the nuclear reactor supplier country for the supply of spare parts for a period of 20-30 years.

Establishing a 24/7 on-call support framework with the Original Equipment Manufacturer (OEM) team for urgent technical issues and maintenance. Training local engineers so that the manufacturing of small components and basic-level repairs can be carried out domestically.

Fuel Supply Guarantees: Institutionalize long-term nuclear fuel supply agreements to prevent geopolitical disruptions.

Radioactive Waste Management, Nuclear Liability and Decommissioning Funds: Establish an independent, legally protected "Radioactive Waste Management", "Nuclear Liability" and "Nuclear Decommissioning Trust Fund" (NDTF) from the very first day of the nuclear plant's operation.

Depositing a fixed percentage of the revenue from the sale of each unit of electricity generated directly into these funds. Investing the funds in long-term, secure government bonds, while taking into account a 100-year lifecycle and factoring in inflation.

Strengthen Global Alliances:

Deepen strategic diplomatic ties with international nuclear bodies (e.g., IAEA) and diverse technology-holder nations to expand the nuclear power programme, diversify future supply chains, fuel security, and technical training.

Public Trust:

Launching national public awareness campaigns regarding nuclear safety and waste management.

Raising awareness about nuclear safety systems (such as the multiple barrier system) through schools, colleges, mass media, and social media.

Involving residents of the areas surrounding the nuclear plant in regular safety drills and interactive meetings. 

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