



# **ENERGY SECURITY AND CHALLENGES TO DEFENCE ESTABLISHMENT**

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## **I. BACKGROUND**

- 1. ENERGY SECURITY IS DRIVEN BY HIGH ENERGY PRICES AND GROWING DEMAND FOR ENERGY**
- 2. FACTORS DRIVING THESE HIGH PRICES, INCL. STRONG DEMAND GROWTH FROM EMERGING ECONOMIES, LIMITED SPARE PRODUCTION CAPACITY, INADEQUATE REFINING CAPACITY WORLDWIDE, SUPPLY DISRUPTIONS CAUSED BY NATURAL DISASTERS, CONCERNS WITH TERRORISM, POLITICAL INSTABILITY IN REGIONS WITH CONCENTRATIONS OF OIL AND GAS, AND CONCERNS ABOUT FUTURE HYDROCARBON AVAILABILITY**
- 3. THIS SITUATION IS SEEN TO REMAIN FOR THE FORESEEABLE FUTURE**

## **I. BACKGROUND**

- 4. ENERGY SECURITY ENCOMPASSES A BROADER AGENDA THAT INCLUDES NOT ONLY SECURITY ASPECTS BUT ALSO: ENERGY DIVERSIFICATION AND MIX, ENERGY CONSERVATION, INFRASTRUCTURAL CHALLENGES, ENVIRONMENTAL PROTECTION, AND THE DEVELOPMENT OF ALTERNATIVE AND RENEWABLE SOURCES OF ENERGY**
- 5. FUEL, NATURAL GAS AND COAL ARE STILL MAJOR SOURCES OF ENERGY BEING USED**
- 6. OTHER MODALITIES FOR ENHANCING ENERGY SECURITY INCLUDE DEMAND MANAGEMENT AND THE IMPORTANCE OF OIL STOCKPILES**

## **I. BACKGROUND**

**7. TRADITIONALLY INDONESIA IS A NET OIL EXPORTING COUNTRY BUT OIL IMPORT CONSTANTLY RAISES DUE TO INCREASING DOMESTIC DEMAND OF ENERGY, THEREFORE ENERGY SECURITY BECOMES CRUCIAL ISSUE FOR INDONESIA**

**8. PROVEN OIL RESERVES: 9 BILLION BARREL  
AVERAGE OIL PRODUCTION: <1 MILLION BARREL  
PER DAY**

## **II. IMPORTANT MEASURES BY INDONESIA, ASEAN & ARF**

### **A. NATIONAL ENERGY SECURITY**

- 1. ADAPTIVE MEASURES TO DECREASE  
DEPENDENCY ON OIL AND ALTERNATIVELY, INCREASE  
THE USE OF NON-OIL RESOURCES, INCLUDING  
RENEWABLE ENERGY**
  
- 2. TO ACCELERATE THE IMPLEMENTATION OF  
ENERGY DIVERSIFICATION AND ENERGY  
CONSERVATION PROGRAMS:**
  - WITH SIGNIFICANT RESERVES OF GAS AND COAL,  
UTILIZATION OF GAS AND COAL AS SOURCES OF  
ENERGY IS TO BE INCREASED**

## **II. IMPORTANT MEASURES BY INDONESIA, ASEAN & ARF**

- TO INCREASE THE UTILIZATION OF RENEWABLE ENERGY, SUCH AS: HYDRO, GEOTHERMAL AND BIOMASS

3. IMPLEMENTATION OF THE NATIONAL ENERGY POLICY WHICH SET THE TARGET IN 2025 THAT,

- THE ENERGY ELASTICITY SHOULD BE LESS THAN 1 (ONE)

- THE NATIONAL PRIMARY ENERGY MIX WILL COMPRISE OF: OIL <20%; NATURAL GAS >30%; COAL >33%; GEOTHERMAL >2%; AND BIO-ENERGY >5%

## **II. IMPORTANT MEASURES BY INDONESIA, ASEAN & ARF**

**4. IMPLEMENTATION OF SUPPORTING POLICIES TO  
ACCELERATE THE USE OF ALTERNATIVE ENERGY,  
NAMELY:**

- ON SUPPLY AND USE OF BIOFUEL**
- ON SUPPLY AND USE OF LIQUEFIED COAL TO  
SUBSTITUTE FUEL OIL**
- ON BIOFUEL DEVELOPMENT FOR  
ACCELERATING ALLEVIATIONS OF POVERTY AND  
UNEMPLOYMENT**
- ON MEDIUM AND SMALL SCALE POWER PLANTS  
USING RENEWABLE ENERGY**

## **II. IMPORTANT MEASURES BY INDONESIA, ASEAN & ARF**

**5. ENCOURAGE MORE INVESTMENT FOR DEVELOPMENT OF: ENERGY INFRASTRUCTURES, INCL. PIPELINE, GAS TERMINAL RECEIVING, COAL TRANSPORTATION, POWER PLANT, RENEWABLE ENERGY (GEOTHERMAL, BIO-FUEL, HYDRO, SOLAR AND WIND), ENERGY EFFICIENT TECHNOLOGIES, FACILITIES FOR RESEARCH AND DEVELOPMENT, TRAINING AND EDUCATION**

**6. ENHANCE IMPLEMENTATION OF THE POLICY OF SECURITY OF VITAL OBJECTS (PAM-OBVIT) BY PROVIDING MILITARY DETACHMENT UNITS IN IMPORTANT SITES, PARTICULARLY IN THE OIL & GAS PRODUCTION AND REFINERY PROJECTS**



## **II. IMPORTANT MEASURES BY INDONESIA, ASEAN & ARF**

### **B. ENERGY SECURITY COOPERATION**

- 1. IN THE CONTEXT OF ASEAN, VARIOUS COOPERATIONS HAVE BEEN DEVELOPED, SUCH AS: ENERGY SECURITY ON PETROLEUM OF ASEAN, TRANS ASEAN GAS PIPELINE , ASEAN POWER GRID, AND ASEAN FLOW ON COAL**
- 2. SECURITY OF TRANSIT ROUTES & MARITIME SECURITY:**

## **II. IMPORTANT MEASURES BY INDONESIA, ASEAN & ARF**

- EYE IN THE SKY PROGRAM (BETWEEN FORCES OF LITTORAL STATES)
- JOINT PATROL MALSINDO (BETWEEN NAVIES OF LITTORAL STATES)

3. ARF BEGAN DISCUSSING ENERGY SECURITY 2006 IN BRUSSEL AND FOLLOWED BY THE 2<sup>ND</sup> MEETING IN SINGAPORE, APRIL 2008

4. ARF CONDUCTED MARITIME SECURITY SHORE EXERCISE IN SINGAPORE, JANUARY 2007

### **III. CHALLENGES TO DEFENCE ESTABLISHMENT**

**RECOMMENDATIONS OF THE 2 ARF SEMINARS ON  
ENERGY SECURITY TO MEET THE CHALLENGES:**

- 1. ENHANCE INFORMATION EXCHANGE ON BEST  
PRACTICES AND POLICY DEVELOPMENT THAT COULD  
BE USED IN CASES OF ENERGY SUPPLY AND  
TRANSPORT DISRUPTIONS OF WHATEVER NATURE**
- 2. ENHANCE COOPERATION ON SAFETY AND  
SECURITY OF CRITICAL ENERGY INFRASTRUCTURES  
AND ROUTES, INCLUDING:**

### **III. CHALLENGES TO DEFENCE ESTABLISHMENT**

**THE SAFETY AND SECURITY OF VESSELS TRANSITING  
THROUGH STRAITS OF MALACCA AND SINGAPORE  
STRAITS**

**3. STRENGTHEN THE SECURITY OF ENERGY SOURCES  
SITES, INCLUDING STOCKPILING**

**4. DEVELOPMENT OF A COOPERATIVE MECHANISM FOR  
LITTORAL-USER STATES COOPERATION ON  
NAVIGATIONAL SAFETY AND ENVIRONMENTAL  
PROTECTION**

### **III. CHALLENGES TO DEFENCE ESTABLISHMENT**

**5. ENHANCE SECURITY OF TRANSIT ROUTES BY LAND OR BY SEA AS A KEY ASPECT OF ENERGY SECURITY. THE HIGH RISK POSED TO SENSITIVE TRANSIT ROUTES BY MAN-MADE AND NATURAL DISASTERS UNDERLINE THE NEED FOR A CONCERTED INTERNATIONAL EFFORT**



**THANK YOU**