RESOURCE AVAILABILITY

- BRAZIL HIGH SHARE OF RENEWABLE SOURCES
- ENERGY MATRIX – EMPHASIS ON HYDROPOWER, BIOENERGY AND WIND
- ENERGY SUPPLY MATRIX – 43% IS RENEWABLE SOURCES, WILL BE 48% IN 2027
- ELECTRIC MATRIX – RENEWABLE SOURCES IS 85%
- BRAZILIAN MATRIX IS CLEAN
- OIL – IT’S PARTICIPATION IN THE ENERGY MATRIX IS EXPECTED TO GO DOWN FROM 36% TO 30% IN THE NEXT 10 YEARS. IT WILL BE REPLACED MOSTLY BY WIND, NUCLEAR AND SOLAR SOURCES.

DECLINING COSTS OF RENEWABLE ENERGY

- SUBSIDIES – TO STIMULATE RENEWABLE SOURCES PROGRAMS
- PHASE OUT SUBSIDIES – INCREASE GAINS IN PRODUCTIVITY AND SCALE
- WIND POWER
    - SURPASSES 12 GIGAWATTS – 8^{TH} PLACE IN THE WORLD
    - PRICE RAN FROM US$ 121 IN 2009 TO US$ 19 PER MEGA WATT-HOUR IN 2018
    - REPRESENTS 7% OF THE ELECTRICITY GENERATION AND IS PROJECTED TO BE 12% IN 2027
- PHOTOVOLTAIC SOLAR ENERGY
    - PRICE RAN FROM US$ 91 IN 2014 TO US$ 32 PER MEGA WATT-HOUR IN 2018
    - 10 YEARS FROM NOW WILL GROW 4 TIMES, FROM 1% TO 4% OF THE MIX OF OUR ENERGY MATRIX
- EXAMPLE OF LOW CARBON FOOTPRINT SOLUTION – IS THE NATIONAL BIOFUELS POLICY – RENOVA BIO – CONTRIBUTES TO THE EXPANSION OF BIOENERGY AND TO THE REDUCTION OF GREENHOUSE GAS EMISSIONS. ETHANOL (ADDITION IS AT 27%) AND BIODIESEL (10%)

CLIMATE CHANGE

- AFFECTED THE RAINFALL REGIME
- VITAL TO THE OPERATION OF HYDROPOWER UNITS
- NOWADAYS MOST OF THE NEW HYDROPOWER UNITES ARE RU -OF -RIVER PLANTS
- MANAGEMENT OF THE GENERATION SCALE FACTOR (HYDROLOGICAL RISK)
- TOGETHER WITH INTERMITTENT WIND AND SOLAR SOURCES PRESENT A MAJOR CHALLENGE
- NATURAL GAS THERMOELETRIC AND NUCLEAR POWER PLANTS ARE IMPORTANT OPTION FOR GUARANTEEING ENERGY SECURITY

LONG TERM ENERGY PLANS

- SUPPORT OF A HIGHLY-QUALIFIED UNIT, THE ENERGY RESEARCH OFFICE (EPE)
- END OF THE YEAR (DECEMBER) UPDATES BOTH THE TEN-YEAR ENERGY PLAN AND THE NATIONAL ENERGY PLAN (COVERS A 30 YEAR HORIZON)
- PLANS – TAKE INTO ACCOUNT THE DIVERSITY OF ENERGY SOURCES (SIZE OF COUNTRY)
  - PUBLIC HEARINGS (INPUTS FROM ALL STAKEHOLDERS)
  - COMPREEHENSIVE ANALYSIS OF THE ENERGY SITUATION
  - SUGGEST STRATEGIES MOVIND AHEAD
- MME – ANOUNCE PLURIANNUAL AUCTIONS IN THE AREAS OF ELECTRICITY GENERATION/TRANSMISSION AND OIL AND GAS EXPLORATION BLOCKS – PREDICTABILITY FOR INVESTORS
- NATIONAL ENERGY POLICY COUNCIL – APPROVED GUIDELINES AND SCHEDULED THE AUCTION OF SURPLUS VOLUMES OF THE SO CALLED TRANSFER OF RIGHTS, AT THE VERY HEART OF THE PRE-SALT (ESTIMATED TO BE UP TO 15 BILLION BARRELS OF OIL EQUIVALENT)
- BREACH OF CONTRATCT

DIVERSIFICATION OF OIL AND GAS PRODUCERS

- BRAZIL – FOREIGN AND DOMESTIC INVESTMENTS OF THE ORDER OF US$ 550 BILLION UNTIL 2027 ARE ESTIMATED IN THE SECTORS OF ELETRIC POWER, OIL, NATURAL GAS AND BIOFUELS

- GLOBAL OIL COMPANIES – BP, EQUINOR, SHELL AND TOTAL (AMONG OTHERS) ARE DIVERSIFING THEIR PORTFOLIOS – INVESTING IN WIND, SOLAR, BIOFUELS, GAS-THERMOELETRIC POWER PLANTS. PETROBRAS IS A PARTNER

POLICY CHOICES

- BRAZIL BIGGEST CHALLENGES – IMPLEMENT FOUR STRUCTURAL REFORMS: PRIVATIZATIONS; SOCIAL SECURITY REFORM (NEW PENSION SYSTEM); ADMINISTRATIVE REFORM; COMMERCIAL OPENING

- MME PRIORITIES – ENHANCE GOVERNANCE STANDARDS AND LEGAL AND REGULATORY CERTAINTY, INTRODUCING MORE PREDICTABILITY TO THE INVESTORS AND MARKET

- LONG TERM INVESTMENTS (EXPECTED)

- MME ESTABLISHED – PERMANENT DIOLOGUE WITH ALL RELEVANT ACTORS – CONGRESS, CIVIL SOCIETY, PUBLIC AND PRIVATE ENTREPENEURS

- DIALOGUE IS KEY TO THE DEFINITION OF A NATIONAL PACT THAT WILL ENABLE BRAZIL TO MOVE FORWARD TO A NEW ERA OF PROSPERITY, WITH A MORE COMPETITIVE MARKET AND BETTER SERVICES PROVIDED BOTH FOR THOSE WHO WANT TO INVEST IN THE COUNTRY AND THE BRAZILIAN SOCIETY