

# SUSTAINABLE ENERGY FOR ALL GLOBAL TRACKING FRAMEWORK 2017

## Africa Chapter

# GTF 2017 WHAT IS BEING REPORTED

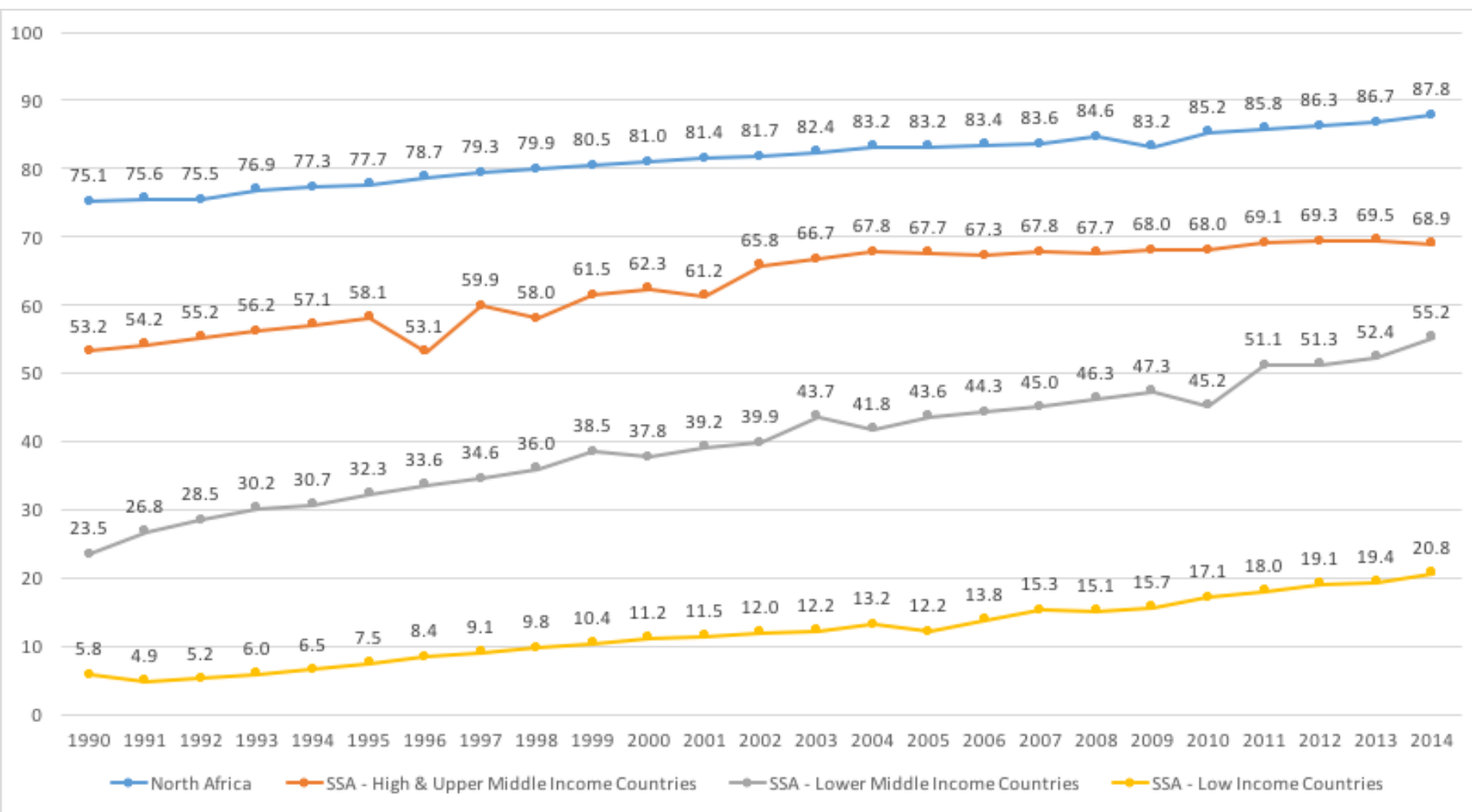
- Energy access – Electrification rates, clean cooking fuels & technologies (CFTs)
- Energy efficiency – total primary energy supply (TPES)/GDP (PPP 2011), annualized change, decomposition/decoupling of energy supply and GDP
- Renewable energy and modern share in total final energy consumption (TFEC)

## OBSERVED DRIVERS - ENERGY ACCESS

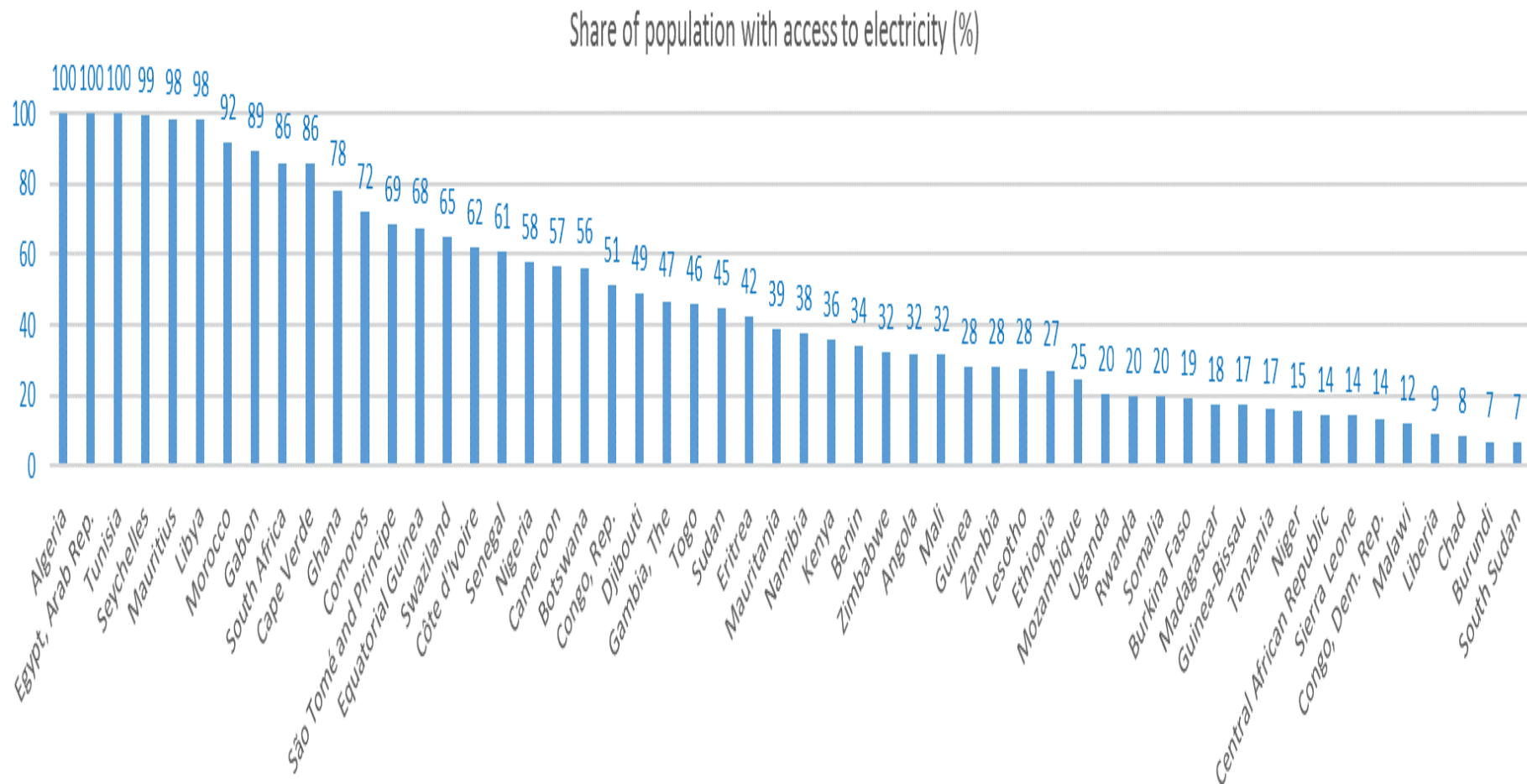
### Energy access- Electrification

- income levels – affordability
- Size of country and population distribution- infrastructure costs (GRID EXTENSION COSTS)
- Adoption of rural electrification programmes- agencies/schemes/subsidies
- Participation in global initiatives- e.g. Lighting Africa
- Focus on grid versus off-grid complementing EACH OTHER
- Economic recession/civil strife-affecting grid network and affordability
- Some connected but long hours without energy supply?

### Share of population (%) with access to electricity, by sub-region, 1990-2014



## Electrification rate and annual change (2012-2014) for individual African countries

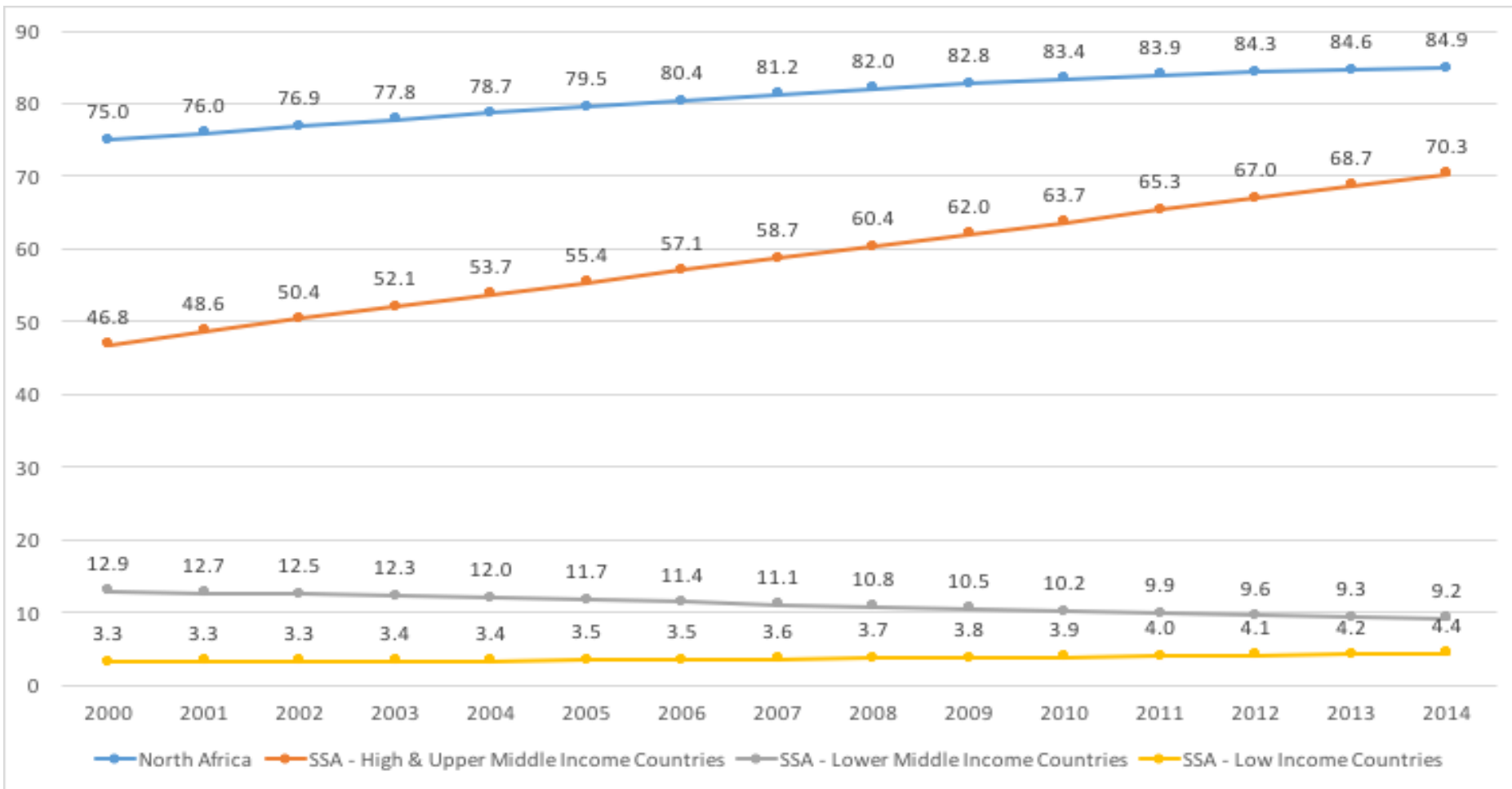


## OBSERVED DRIVERS ENERGY ACCESS CONTD

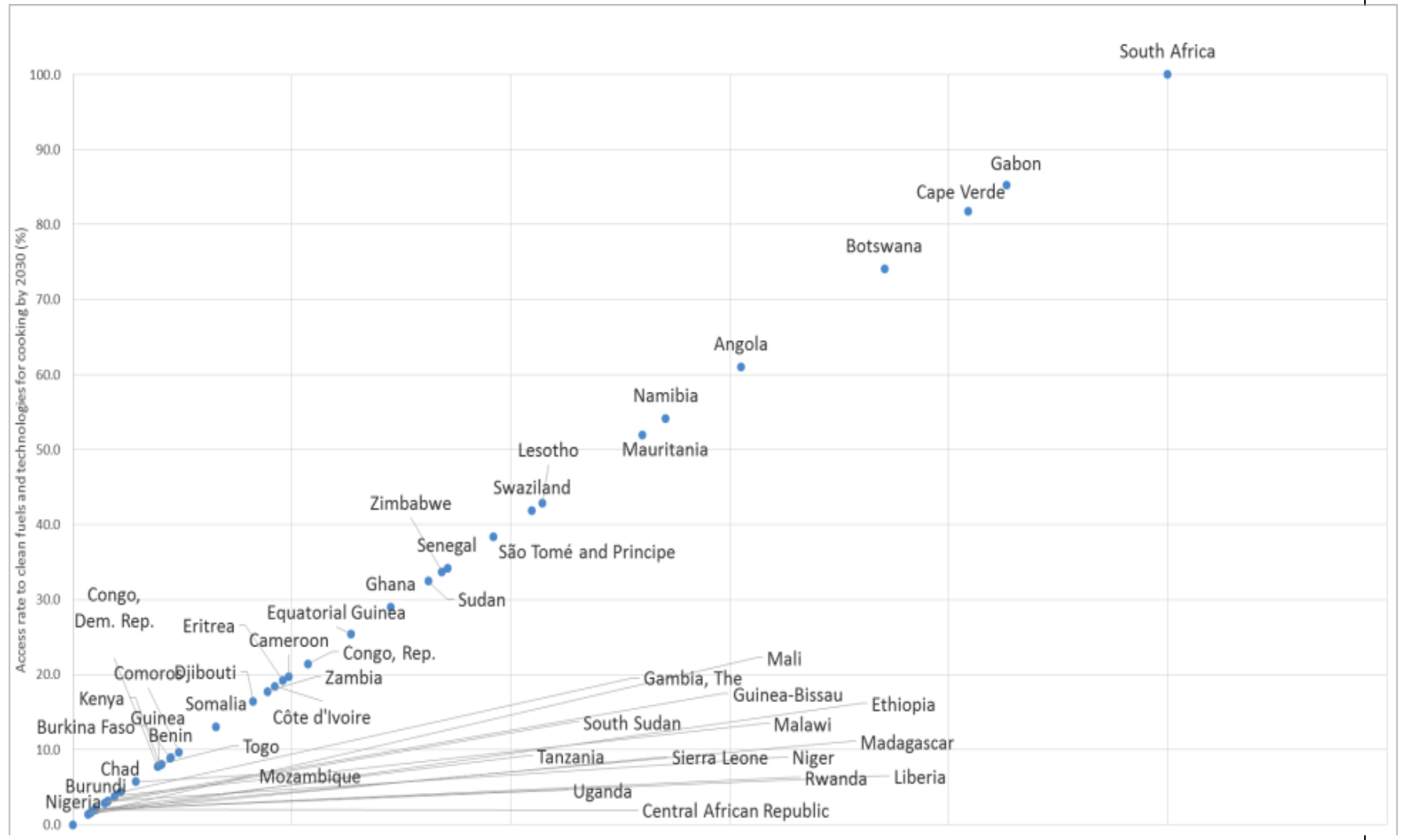
### Energy access - CFTs

- Income levels- affordability
- Accessibility and cost of fuels- e.g. LPG, electricity and related policy reforms in place
- Commercialization levels of technology dissemination
- Participation in Global initiatives e.g. GACC
- Lock-in in traditional cooking and Culinary preferences
- Policy Drive?

**Figure 2.13 Share of population (%) using Clean Fuels and Technologies, by sub-region, 1990-2014**



**Figure 2.7 Hardly one African country would be projected to achieve universal access by 2030 if business as usual trends were to continue**



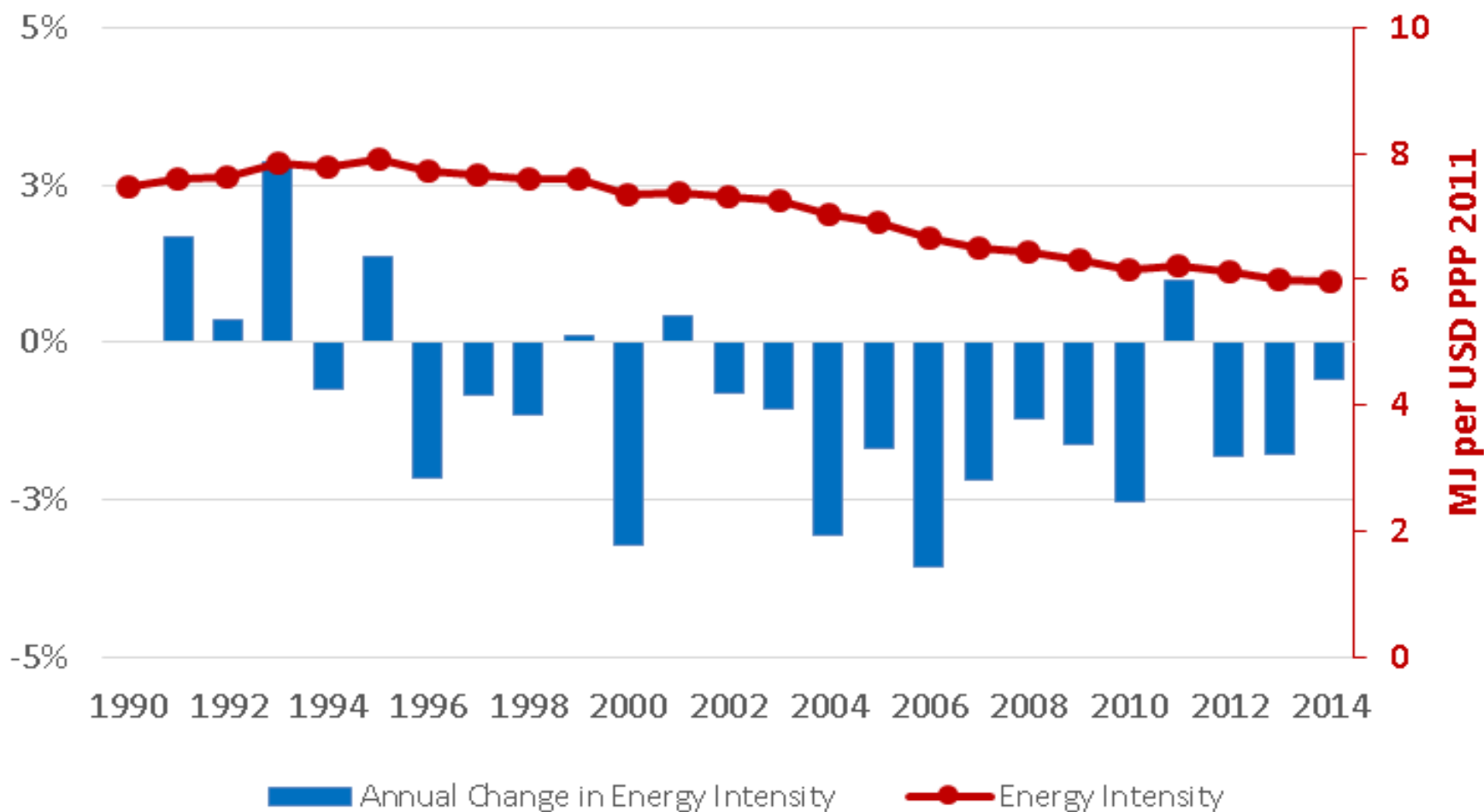


## OBSERVED DRIVERS- ENERGY EFFICIENCY

### Energy Efficiency

- Commodity process esp. oil – GDP
- Growth in services – high GDP low total energy supply
- High impact/fast growing economies – regional GDP
- Level of industrialization – HIGH/LOW TPES
- Conflict/civil wars/economic crisis- LOW GDP
- Policy – power sector measures driven by POWER SHORTAGE
- Largely driven by global/national circumstances- CURRENTLY EFFECT OF policies/targets limited

## Energy intensity and annual change in intensity in the Africa region, 1990-2014

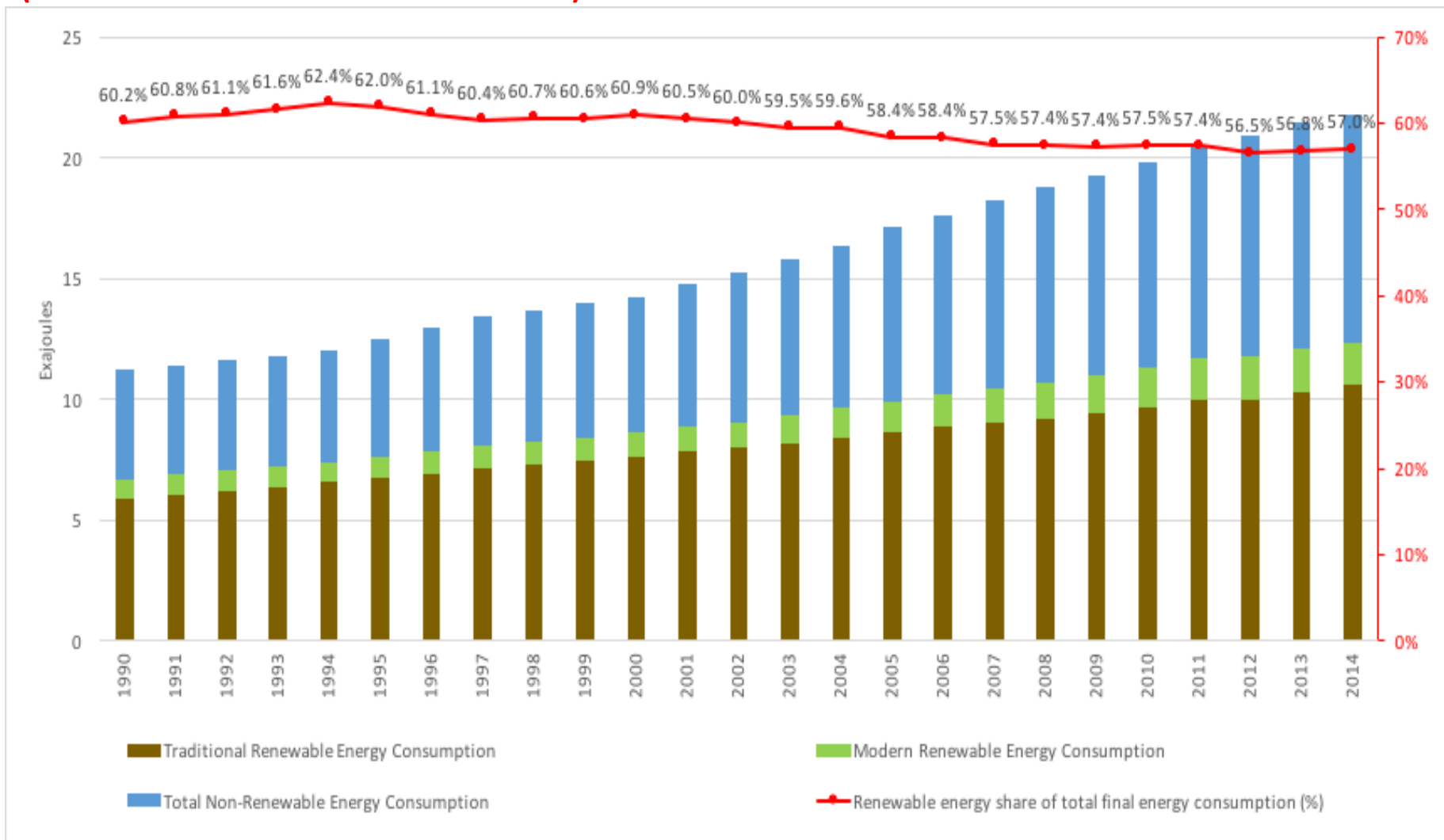


# OBSERVED DRIVERS- RENEWABLE ENERGY

## Renewable Energy

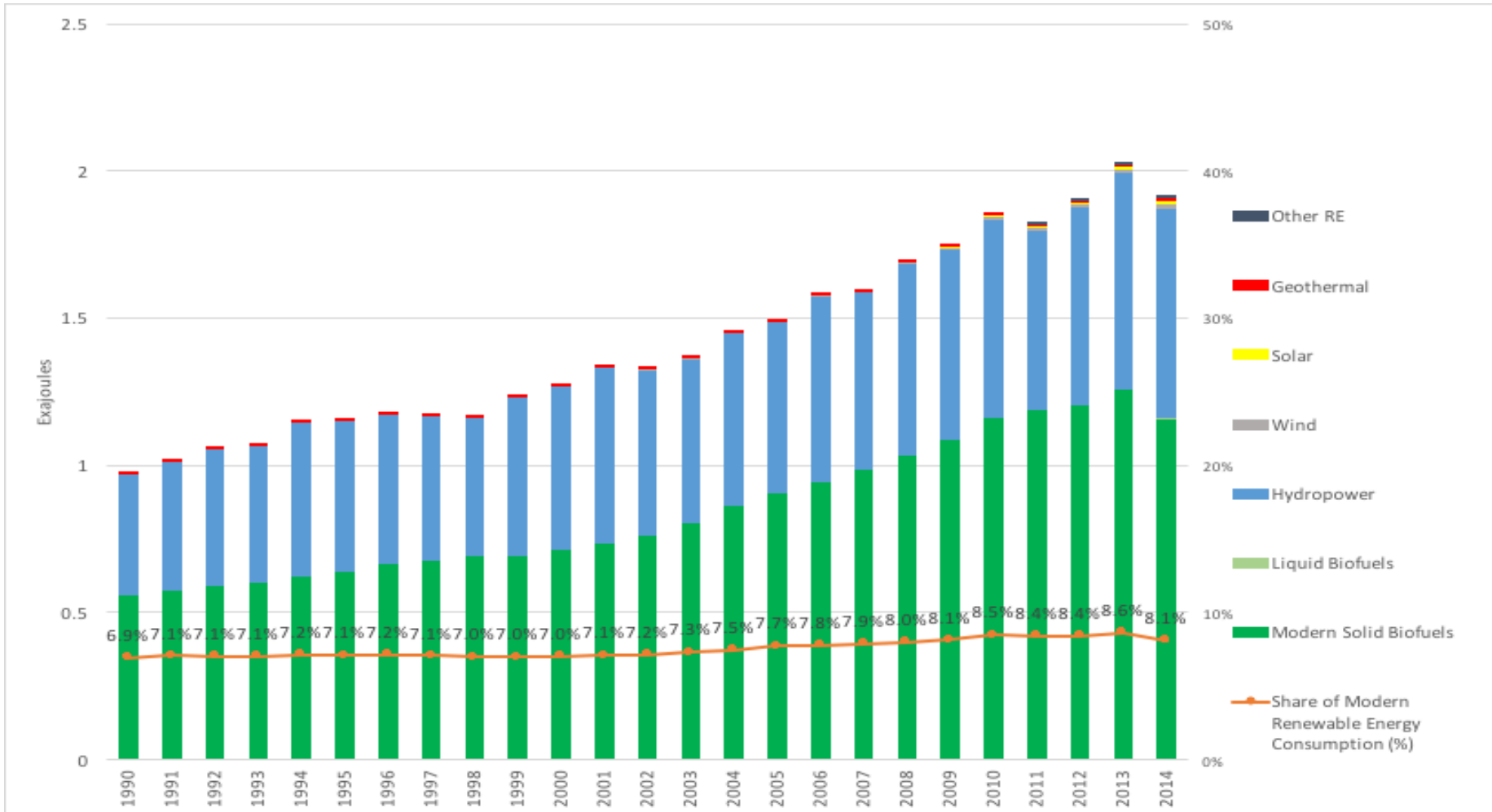
- Resource base - biomass, hydro, solar, wind
- ECONOMIC STATUS - affordability of modern RE
- Declining costs of technologies
- Policy drivers – REFITS, bid,ding, subsidies...
- Global initiatives- eep, aeep, afdb, irena etc

## Share of renewable energy consumption in TFEC in the Africa region, 1990-2014 ( LARGE TRADITIONAL BIOMASS SHARE)



## Modern renewable energy consumption by source in the Africa region, 1990-2014

( Modern solid biomass share-all biomass used in commercial and industrial activities)



## Data Status

- Data constraints, e.g. reliability of connection measurements and CFTS surveys
- Surveys not regular – so GTF data combined with modelled data
  - Majority of surveys not annual- but 5-10 years with some extrapolations
  - Some data sets stagnant- energy balances
- Require to improve on data for GTF reporting
- Reviewed IEA, AFREC , SDRA V STATISTICS - but have shortfalls
- Also need to know how often AFREC & regional organs source data and validation mechanisms, Need to know WHO collects data in countries and how often
- How often countries conduct energy baseline surveys, produce energy balances

# Data way forward

## WHAT CAN AFRICAN COUNTRIES AGREE ON?

- **Data collection systems**- MS cognisance of how data will be collected, analysed and used- Common templates for surveys
- **Validation system of data**
- **Reporting mechanisms**- peer reviewed at MS/RECS level
- **Ownership of data**-Who owns your data- IEA, UN, AFREC
- **Definitions and consistency** in SDG7 target/indicator
  - Is connection to grid adequate measure of electrification rates- or services
  - is TPES/GDP adequate for measuring rate of EI improvements- any Bottom up elements to measure
  - Is Traditional Biomass really RE esp. solid biofuels used in commercial/ industrial activities
  - Is large hydro modern RE

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Thank you