

# move

ICOLIM 2017

PAPER N. 41

STRASBOURG, 27th APRIL

SCHEDULE:

PRODUCT DISTRIBUTION AND SMART GRIDS – IMPACTS ON LIVE WORKING

## THE ENERGY POLICY IN PORTUGAL

FOCUS:

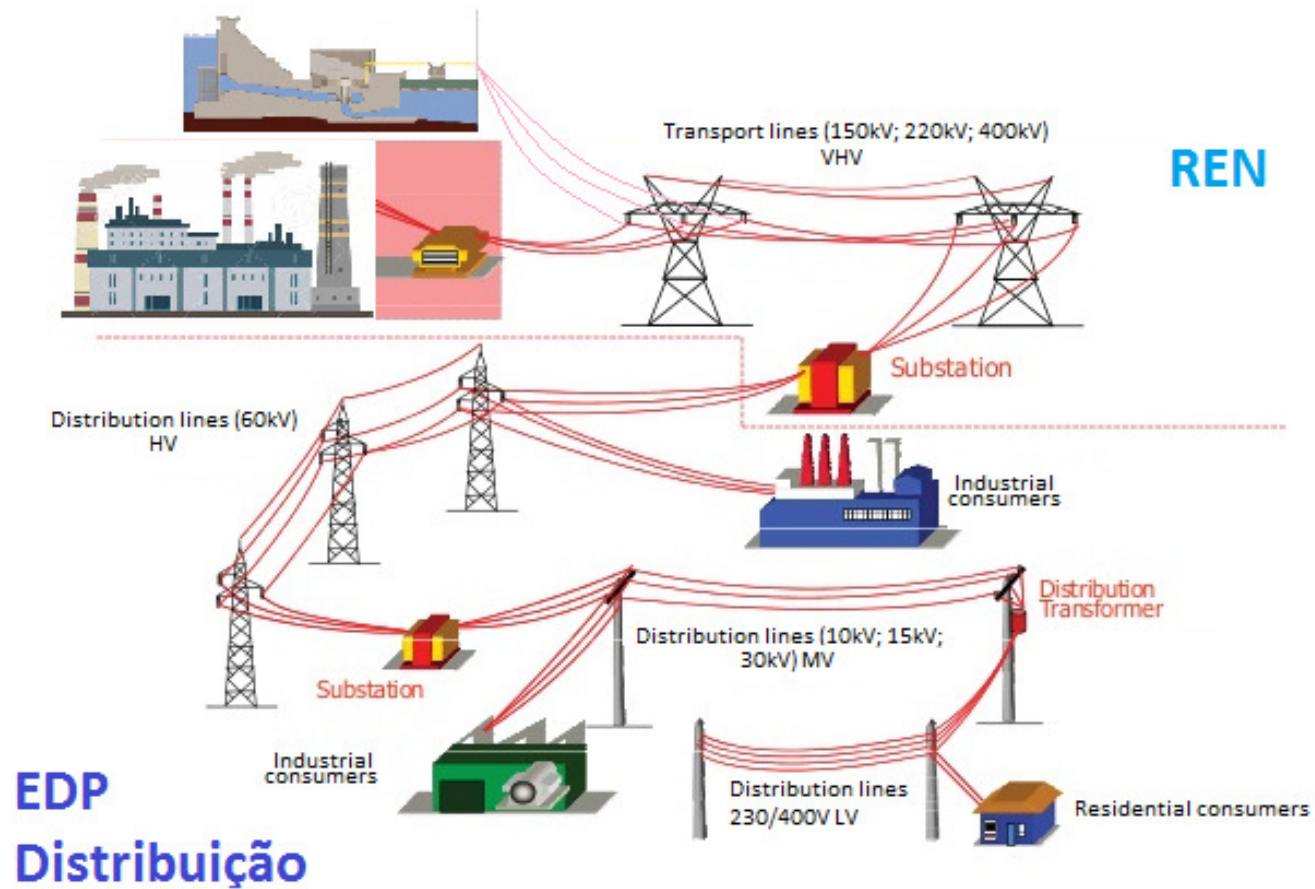
PRODUCT DISTRIBUTION

RENEWABLE RESOURCES OF ENERGY

SMART GRIDS

## Traditional Distribution plant:

- One-way power flow
- Easy power control
- Easily provide for Special Regime of Exploration (Live work parachute)

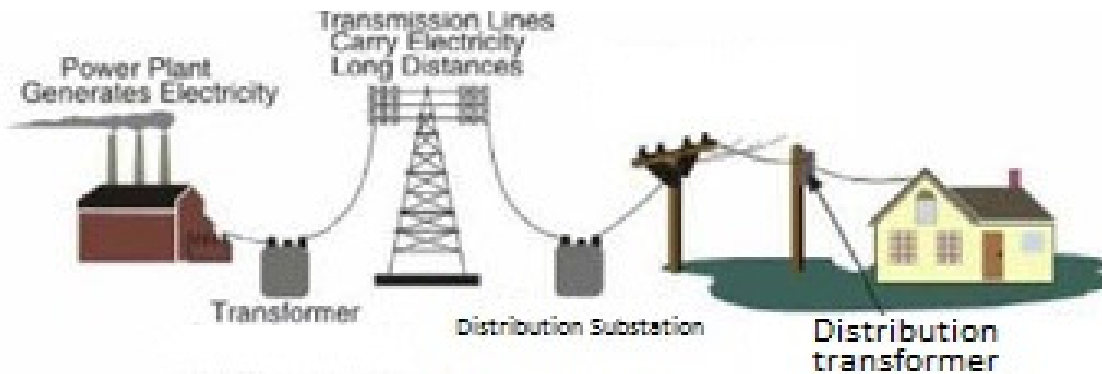


## Actual Distribution plant:

- Every-way power flow
- Complex power control
- Complex provide for Special Regime of Exploration (increasing number of stakeholders to deal with)

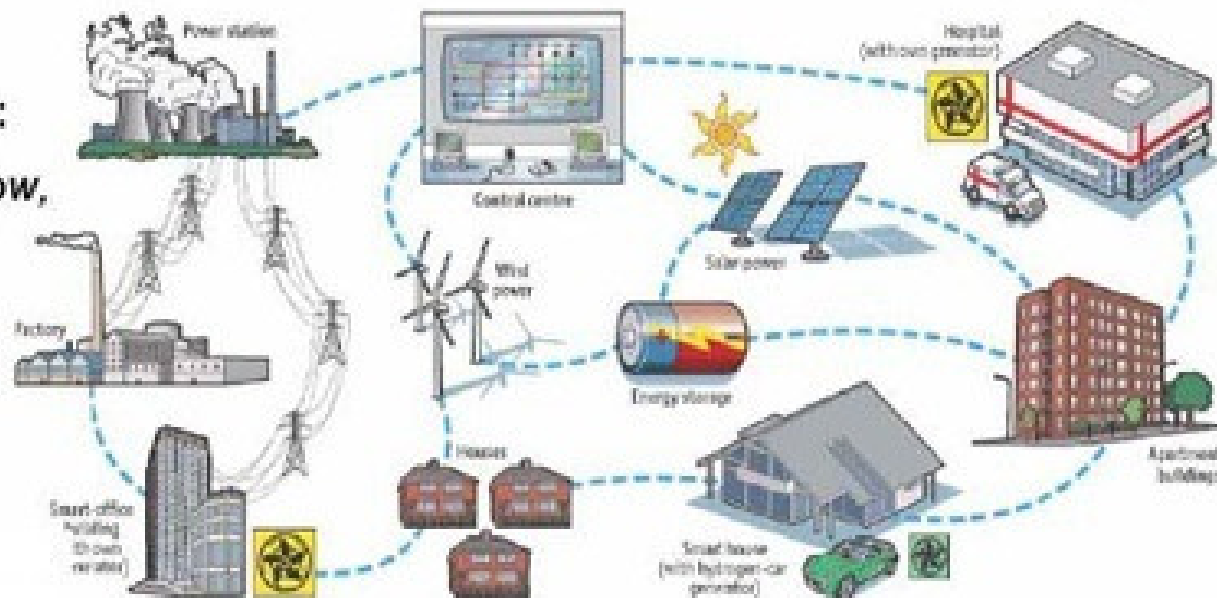
**Before Smart Grid:**

*One-way power flow,  
simple interactions*



**After Smart Grid:**

*Two-way power flow,  
multi-stakeholder  
interactions*



Every coin has two sides





## First side

- Less energy dependence from mining resources
- Green energy and less greenhouse gases emissions
- Self energy production and electric bill reduction for domestic consumers
- The electricity consumption in 2016 totalized 53.8 TWh  
(RENEWABLE GENERATION 33,3 TWh)(source: DGEG)

## The other side of the coin

- Sun, Wind and water(rain) are not disposable as we like
- Complex smart grids with more equipments intalled
- Space and weight reduce requires less distances in electrical connections
- Some market solutions don't concern live work ruelles

## AND IN THE FUTURE?

- Energy clients/consumers more and more demanding consumers
- Energy costs with more and more economic impact in a global world
- The nanotechnologies window
- Safty work conditions

THANK YOU FOR YOUR ATTENTION