Energy Efficiency Training Week for Sub-Saharan Africa

# French energy policies and support to energy efficiency in Africa





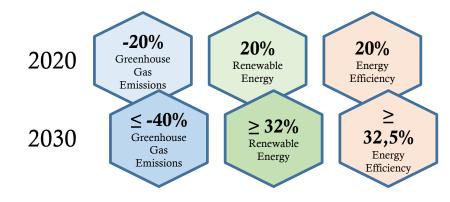
## European energy and climate union

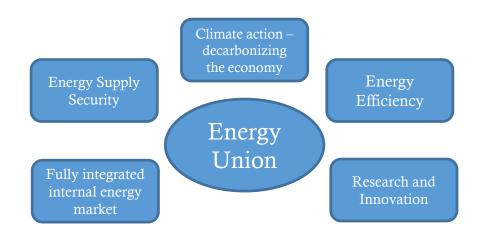
### EU's GHG Emissions (~4,2 GtCO2e in 2017): 9,3% global emissions

- 2030 climate and energy framework
  - Sets EU-wide targets and policy objectives for the period from 2021 to 2030
- Energy union aims at ensuring that Europe's energy supply is safe, viable and accessible to all

### Main levers

- EU ETS (Carbon market for heavy energyusing industries and airlines) → Cap and Trade market
- Directives (regulations and guidelines) for energy efficiency, eco-design, building performance
- Climate mainstreaming in the EU budget
- 20% of the Multiannual Financial Framework for 2014-2020 (€ 206 bn)
- 25% of the Multiannual Financial Framework for 2021-2027 (€ 320 bn)







# French energy and climate policy

### France's GHG emissions (~445 MtCO2e in 2017): 0,9% of global emissions

- Act on energy transition for green growth (2015)
- Climate Plan (July 2017)
  - Sets up the objective of Carbon neutrality for 2050
- France's national low carbon strategy (in revision)
  - Roadmap for France's climate change mitigation policy in line with European targets
- France's multiannual energy plan (in revision)



Increase the share of renewable energy sources to 32% of the final energy in 2030 And 40% of electricity production



-40% GHG in 2030 compared to 1990 Carbone neutrality in 2050



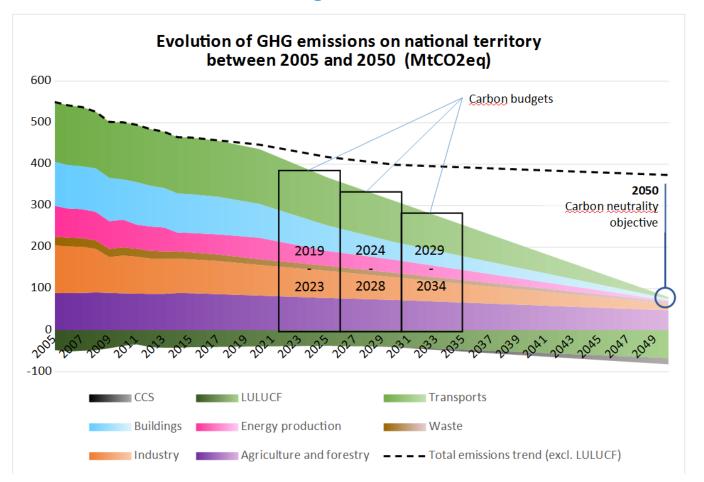
-30% fossil fuel consumption in 2030 compared to 2012







Reduce final energy consumption by **50%** in **2050** compared to 2012





# French energy efficiency policy

### France's EE policy is in line with the European framework

- Transposition of European directives (regulations, guidelines)
- Cross-sector
  - French White Certificate (Energy Economy Certificate CEE) that are tradable
- Building standards
  - Set energy performance targets for new building; since 2012 50 kWh/m2 for the primary energy consumption in all new buildings
  - New standards will include environmental criteria as well (starting in 2020): life cycle analysis to promote the use of bio-based and sustainable materials
- Building retrofitting plan
  - Target of 500 000 homes/yr. to achieve the goal of 100% BBC (Low Consumption Buildings ~ 50 kWh/m2) on average in 2050
  - Financial support for energy efficiency and building renovation: fiscal rebates; grants; subsidized loan; reduced VAT on building works for energy efficiency
- Transport sector
  - Incentives to replace old cars by cleaner and more efficient ones
  - Bonus-penalty schemes to accelerate the shift to cleaner and more efficient cars
- Industry sector
  - Mandatory energy audit every 4-year













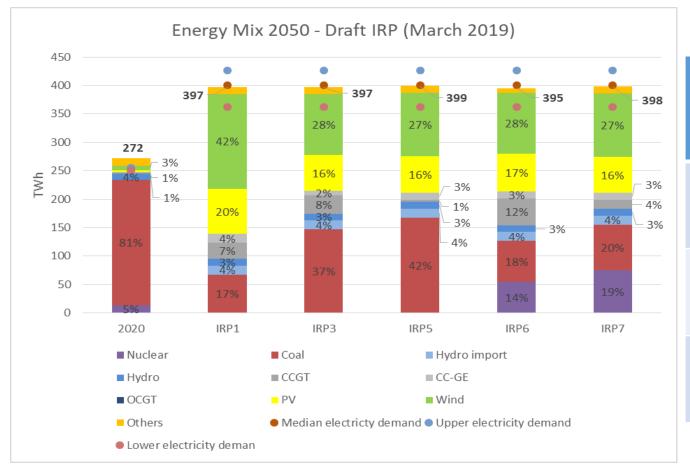
# Importance of energy efficiency

- Energy supply security and reduction of the dependence on energy imports
  - Help fill the gap between increasing electricity demand and generation capacity
- Main lever to reduce GHG emissions
  - Over 40% of the global emissions cuts needed to reach the global climate goals without new technologies according to the IEA
  - Main driver of cumulative GHG emissions reduction between 2000 and 2017 for SA (SA's 3<sup>rd</sup> climate change report, 2017)
- Reduction of household energy bill; improvement of industries' competitiveness
  - For France energy efficiency measures could save up to 17% of the industry sector consumption by 2020 with a payback time on the over-investment of less than 3 years



# South-Africa energy transition

- South-Africa's GHG emissions (~510 MtCO2e in 2017): 1,13% of global emissions
- Gap between existing+committed power plants and energy consumption growth
- IRP addresses these challenges through various scenarios



	2018	2020	IRP1 (least cost)	IRP3 (median growth)	IRP5 (market- linked gas price)	IRP6 (carbon budget)	IRP7 (carbon budget + market- linked price)
Installed capacity (GW)	54	61	148	126	126	126	126
CO2 (Mt/yr.)	~240	236	36	54	51	36	38
Water usage (bn L/yr)		260	82	160	178	92	90

14th October 2019

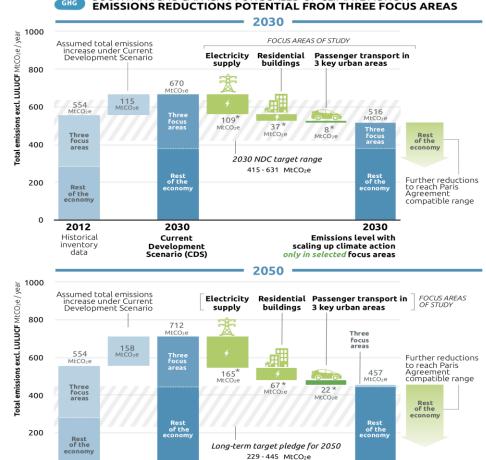


# Potential of scaling up climate actions in South-Africa

### Study conducted by Climate Action Tracker

- Potential of scaling up climate action in South-Africa in 3 main sectors (electricity generation; urban passenger transport and residential building)
  - Reduction of the total greenhouse gas emissions by up to 96% below 2012 emissions in these focus areas by 2050
  - Reduction of economy-wide emissions by 17% below 2012 levels
  - With electricity supply current trends, **energy efficiency** in buildings could still **reduce GHG** emissions of the residential sector by 35%





SCOPE OF STUDY

2050

Current

Development Scenario (CDS)

2012

Historical

inventory

Emissions reductions from electricity use are allocated to end use sectors, for example emissions from electricity use in buildings are allocated to the buildings sector and removed from the electricity supply sector total. The lighter green shade represents electricity rélated emissions.

2050

Emissions level with

scaling up climate action

only in selected focus areas



# French support to energy efficiency in Africa

### France's aid instruments for developing countries



- Bilateral cooperation through Ministries and public entities; know-how exchanges
- Financial support through French Facility for the Global Environment (FFEM) for project targeting climate change, biodiversity preservation, land restoration
  - Energy access fund to help invest in access to electricity in rural and semi-urban communities in Sub-Saharan Africa



- FASEP: funds project preparation studies in favor of local governments and public entities realized by French consultancy firms
  - Upgrade of the electricity distribution network of Nelson Mandela Bay municipality (completed)
  - Waste to energy for the municipality of Tshwane (ongoing)
  - Sustainable energy supply for the SKA telescope (ongoing)









- Facility for Eskom for transmission lines to connect renewables to the grid
- Pilot projects for a just transition in coal regions



SUNREF credit line with IDC to support renewables and energy efficiency









### For additionnal information

French facility for the Global Environment (FFEM)

https://www.ffem.fr/en

French Development Agency (AFD)

Johannesburg office

https://www.afd.fr/en

afdjohannesbourg@afd.fr

SUNREF label

https://www.sunref.org/en/

Embassy of France in South-Africa

Department of Economic Affairs

https://za.ambafrance.org/ pretoria@dgtresor.gouv.fr