



● EU Bioenergy policy

COMPETE: Bioenergy for sustainable development in Africa



● Policy background

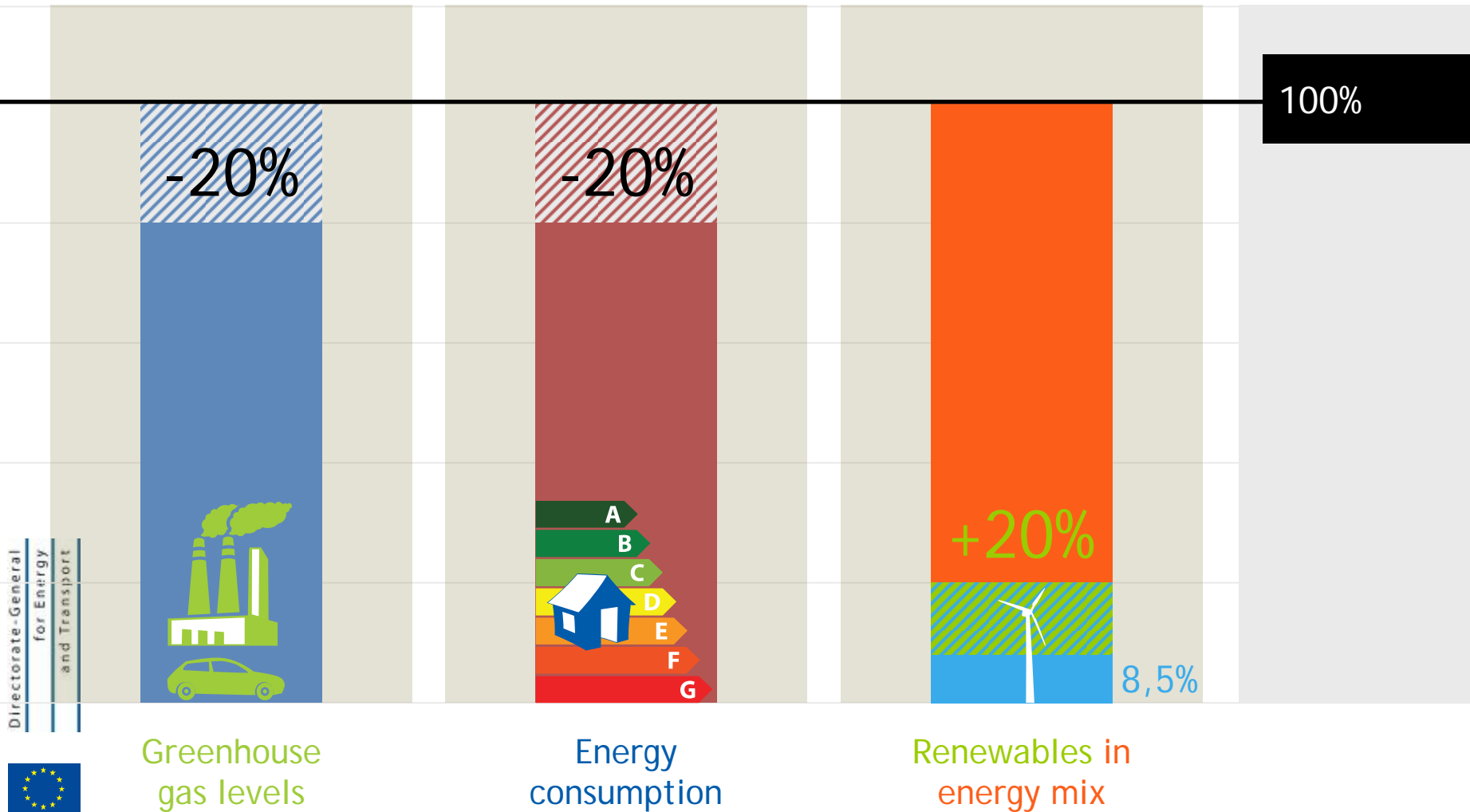
- Renewable Energy promotion since 1997
 - » National targets for RE electricity since 2001
 - » National targets for RE in transport since 2003 (indicative targets)
- Biomass action plan (2005)
 - » Coordinating step of setting out measures to increase the development of bioenergy
 - » Measures subsequently taken up in various actions (legislative, research programmes, ..)

Progress towards the 2010 targets - patchy

	Electricity		Transport (biofuels)			Electricity		Transport (biofuels)	
	2004-2006 growth	progress towards targets	2005-2007 growth	progress towards targets		2004-2006 growth	progress towards targets	2005-2007 growth	progress towards targets
AT	☺	☹	☺	☺	LV	☹	☹	☹	☹
BE	☺	☺	☺	☹	LT	☺	☹	☺	☺
BU	☺	☹	☺	☺	LU	☺	☺	☺	☺
CY	☹	☹	☹	☹	MT	☹	☹	☺	☺
CZ	☺	☹	☺	☹	NL	☺	☺	☺	☺
DK	☹	☺	☺	☹	PL	☺	☹	☺	☹
EE	☺	☹	☺	☹	PT	☺	☹	☺	☺
FI	☹	☹	☺	☹	RO	☹	☹	☺	☹
FR	☺	☹	☺	☺	SK	☺	☹	☺	☺
DE	☺	☺	☺	☺	SI	☹	☹	☺	☹
GR	☺	☹	☺	☹	ES	☺	☹	☺	☹
HU	☺	☺	☺	☹	SE	☺	☺	☺	☺
IE	☺	☺	☺	☹	UK	☺	☹	☺	☹
IT	☺	☺	☹	☹	EU	☺	☺	☺	☺

The 20-20-20 EU policy

By 2020





● Renewable Energy Directive

- Combat climate change
 - Security of energy supply
 - Green jobs and innovation
-
- ❖ 2008: Commission proposal (January); Directive agreed by Member States and Parliament (December)
 - ❖ Directive 2009/28/EC
 - ❖ Publication Official Journal June 5, 2009.

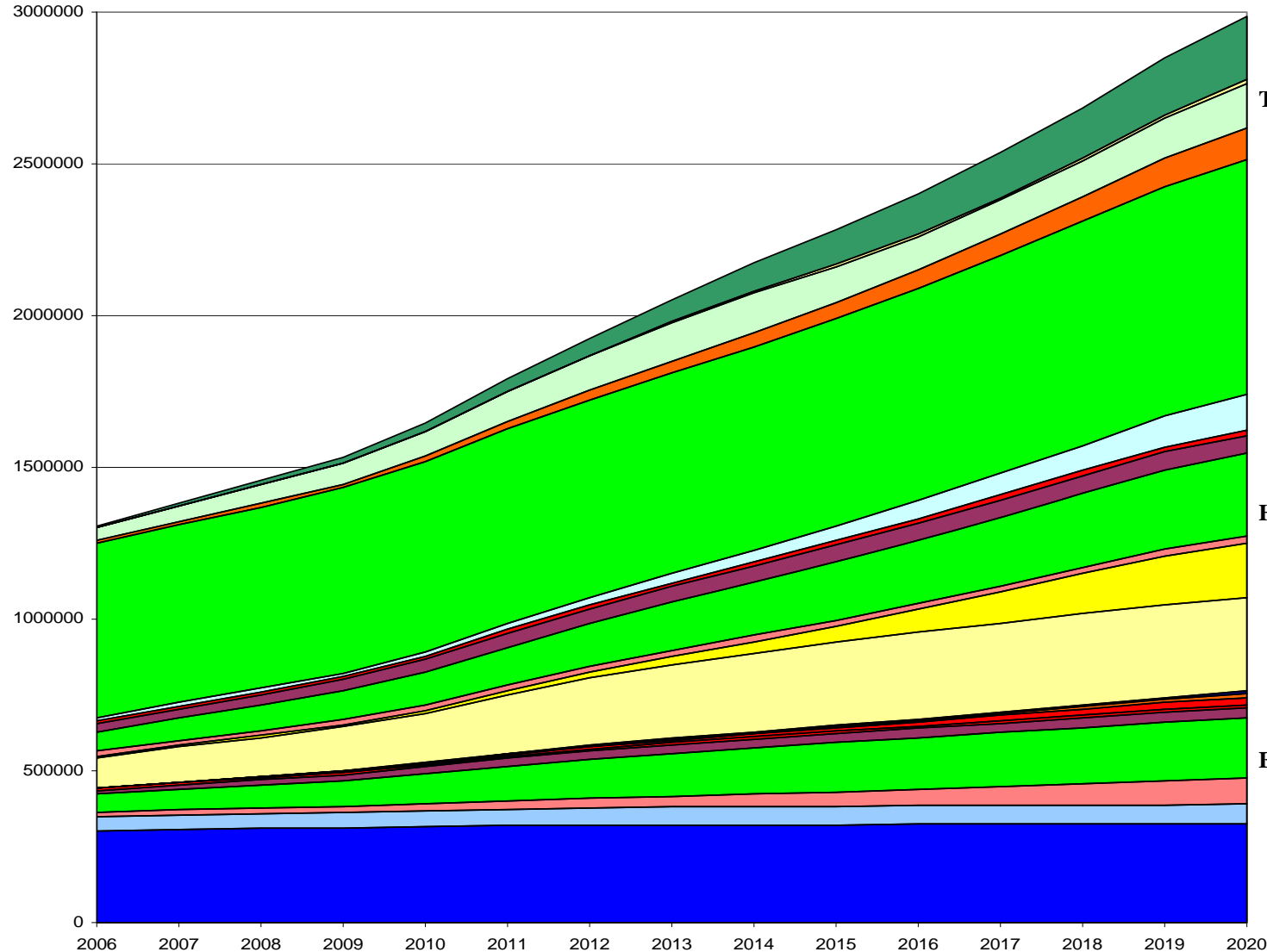


The Renewable Energy Directive

1. Sets **mandatory national targets** for renewable energy shares, including 10% renewables in transport (incl. biofuels) in 2020
2. Requires **national renewable energy action plans**
3. Creates **flexibility** by facilitating “joint projects” with Member States or third countries and “statistical transfers” between Member States to help reach targets cost effectively
4. Requires **reduction of administrative and regulatory barriers**, improvements in provision of information and training and improves renewables’ access to the electricity grid
5. Creates a **sustainability regime** for biofuels (criteria for economic operators, monitoring for the Commission)

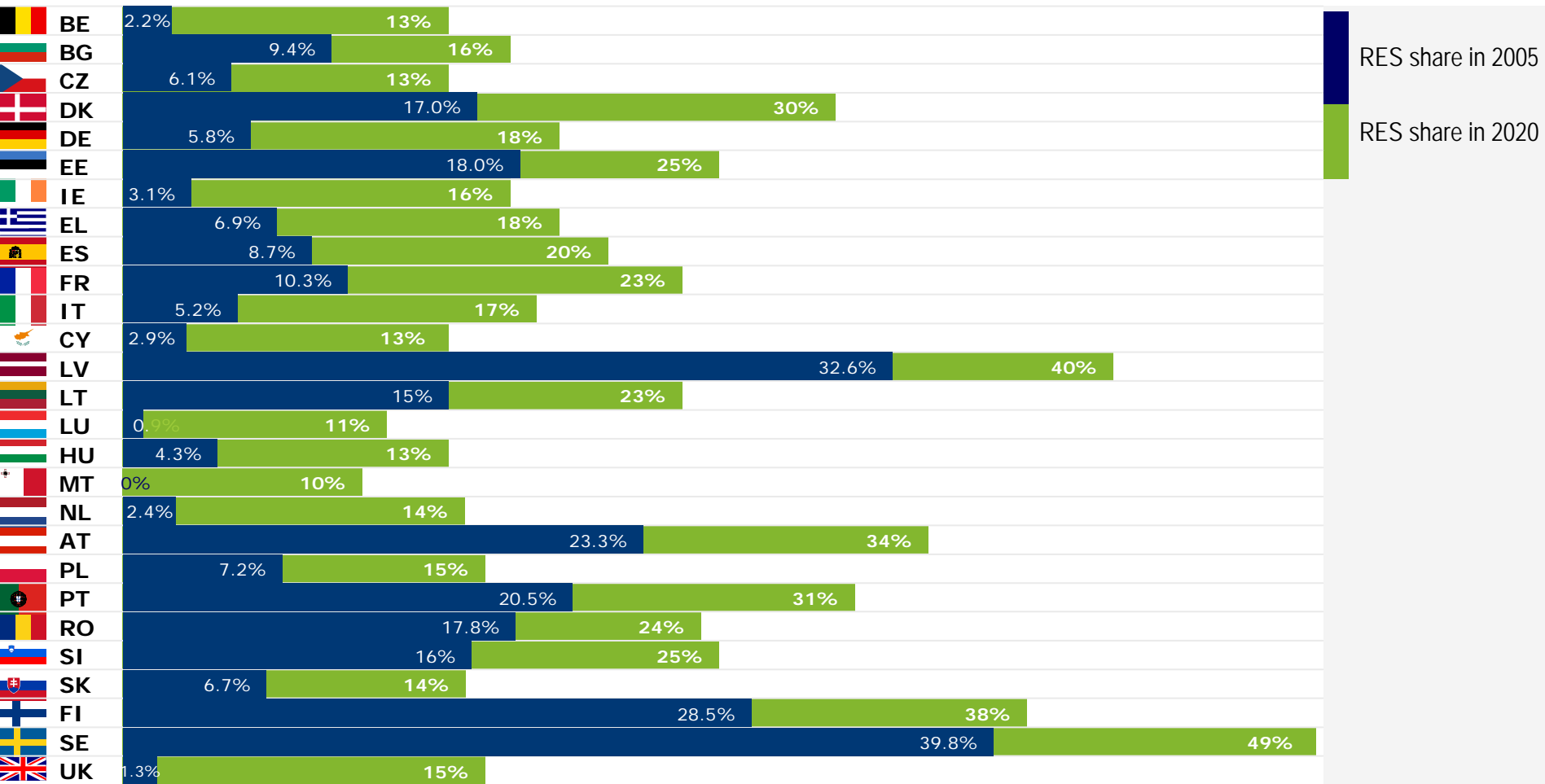
A Commission view on how we get there...

GWh



- Biofuel import
- Advanced biofuels
- Traditional biofuels
- Heating - Solar thermal and hot water
- Heating - Solid biomass (non-grid)
- Heat pumps
- Heating - Geothermal (grid)
- Heating - Biowaste (grid)
- Heating - Solid biomass (grid)
- Heating - Biogas (grid)
- Wind offshore
- Wind onshore
- Tide & wave
- Electricity - Solar thermal
- Photovoltaics
- Electricity - Geothermal
- Electricity - Biowaste
- Electricity - Solid biomass
- Electricity - Biogas
- Hydro small-scale
- Hydro large-scale

Member States' targets



● Directive implementation

- Member States to:

- » Transpose into national legislation by 5 December 2010

- » Draw up national renewable energy action plans (NREAPs) by June 2010

- Facilitates monitoring of the Directive and provides stability for investment
- Commission has adopted a template in June 2009

Renewable Energy Action Plans - Template

The image displays a comprehensive set of 40 thumbnail pages from a Renewable Energy Action Plan template. The pages are arranged in a grid-like fashion, showing various components of the plan:

- Text-heavy pages:** Numerous pages containing detailed text, likely representing sections for goals, strategies, and implementation details.
- Tables:** Several pages featuring tables with multiple columns and rows, used for data tracking, scheduling, or resource allocation.
- Diagrams and Charts:** Some pages include diagrams or charts, possibly representing energy flow, resource distribution, or project timelines.
- Summary and Overview Pages:** Pages that appear to be executive summaries or overview sections, providing a high-level view of the plan.

The thumbnails are presented in a way that suggests a complete and detailed template for developing a Renewable Energy Action Plan.

Biomass availability

Sector of origin	Amount of domestic resource ¹	Imported		Exported	Net amount	Primary energy production (ktoe)
		EU	Non-EU	EU/non-EU		
A) Biomass from forestry ² :	<i>Of which:</i>					
	1. direct supply of wood biomass from forests and other wooded land for energy generation					
	<i>Optional - if information is available you can further detail the amount of feedstock belonging to this category::</i> a) fellings b) residues from fellings (tops, branches, bark, stumps) c) landscape management residues (woody biomass from parks, gardens, tree rows, bushes) d) other (please define)					
	2. indirect supply of wood biomass for energy generation					
	<i>Optional - if information is available you can further detail:</i> a) residues from sawmilling, woodworking, furniture industry (bark, sawdust) b) by products of the pulp and paper industry (black liquor, tall oil) c) processed wood-fuel d) post consumer recycled wood (recycled wood for energy generation, household waste wood) e) other (please define)					

Table 7a: Estimated biomass domestic supply in 2015 and 2020 Sector of origin		2015		2020	
		Expected amount of domestic resource	Primary energy production (ktoe)	Expected amount of domestic resource	Primary energy production (ktoe)
A) Biomass from forestry:	1. direct supply of wood biomass from forests and other wooded land for energy generation				
	2. indirect supply of wood biomass for energy generation				

● EU-wide sustainability criteria for biofuels

- Apply to single consignments of biofuels
- Apply also to bioliquids: i.e. in power and heat sector
- Have to be met in order to:
 - » Count toward the targets (10% and the '20%')
 - » Count toward obligations (put on suppliers)
 - » Be eligible for financial support (for their consumption)
- Single EU scheme
 - » Applies to both EU production and imports
 - » Member States cannot set additional criteria*

● Sustainability criteria

1. GHG saving of at least 35% (50-60% from 2017/18)
 2. No raw material from land with high biodiversity value
 3. No conversion of land with high carbon stock
 4. (EU raw materials must also meet EU agricultural “cross compliance” rules)
 5. Companies may be required to *report* on certain issues, which the Commission has yet to determine.
- Enforcement of the sustainability criteria – responsibility of Member States (including e.g. adequate standard of independent auditing)
 - Alternative: The Commission can accredit ‘voluntary schemes’ (or international agreements) as sufficient proof. Member States must accept this evidence.

● Should there be sustainability criteria for solid/gaseous biomass used for energy?

- Current situation:
 - » Certain guarantees of sustainability for European biomass (EU legislation and voluntary schemes).
 - » Less than 5% of biomass imported, although imports of wood pellets are on the increase.
 - » Many small-scale producers of bio-heat and bio-electricity (including households) in the EU
- Considerations
 - » Administrative burden/costs vs. environmental benefits
 - » Consistency with the biofuels/bioliquids scheme
 - » Smooth functioning of the internal market
- Report with possible legislative proposal aiming to be delivered by December 2009

● Commission monitoring and reporting

- Biannual monitoring and reporting (2012-2020):
 - » Biofuel impacts (land use, soil, water and air, biodiversity, social sustainability, food security, wider development issues, commodity price changes, ..)
 - » Bioenergy: impact of increased demand on other biomass using sectors

● Initiative for the sustainable development of bioenergy in Africa

- Brazil, EU & African Union
- Pending finalisation of African Union Commission decision process
- Sustainable bioenergy, e.g. biofuels and bioelectricity
 - » Country studies analysing potential, framework conditions and local impact (incl. social and economic)
 - » Promotion of concrete projects in interested African countries and Regional Economic Communities.

● Thank you – ewout.deurwaarder@ec.europa.eu

