

Energy Statistics

more decisions, more data



Overview

Background



Work programme areas



New demands



Summary



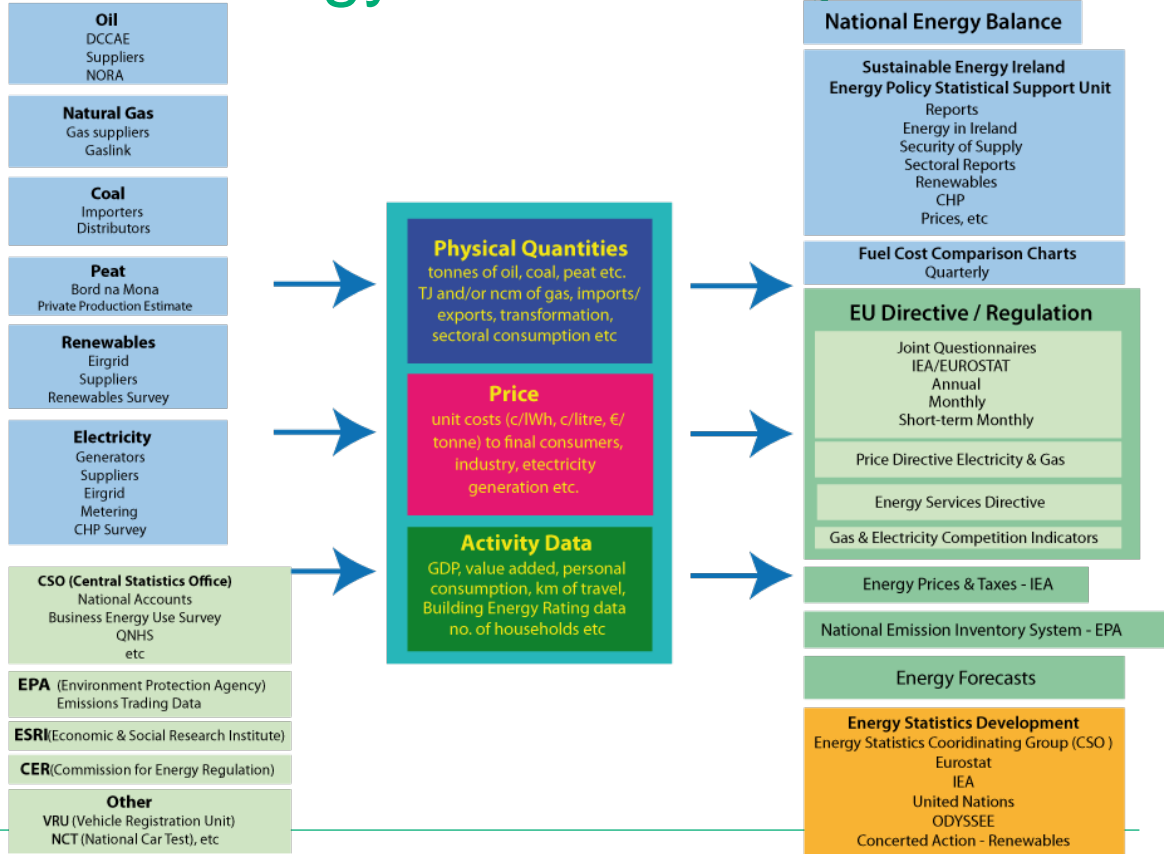
SEAI's Role

- Collect, process and publish energy statistics
- Conduct statistical and economic analyses of energy services and sustainable energy options
- Contribute to the development and promulgation of appropriate sustainability indicators

Work Programme Areas

- Surveys
 - Energy suppliers, importers, etc
 - Renewables, CHP
 - Energy Supply and prices
 - Business Energy Use
- Reporting Obligations
 - IEA/Eurostat (EU Directives & Regulations)
 - UNFCCC, EPA
- Analysis
 - Trends and policy issues arising
 - Indicators
 - Modelling – transport, households etc
- Energy Statistics Development
 - CSO, CER, VRU, NCT, ETS etc
 - Eurostat Energy Committees, Odyssee network, IEA
 - National Inventory System
- Forecasting & Modelling
 - Supporting the modelling group
- Policy Support
 - Evidence based assessment
 - Progress towards targets
 - etc

National Energy Statistical System



Questionnaires – Annual energy data collection

1. Coal (and solid fuels)
2. Gas
3. Electricity and Heat
4. Oil
5. Renewables
6. Nuclear
7. Disaggregation (Eurostat only)
 - Currently households but plans for industry and services

Questionnaires – Monthly

- Timeliness M-1
 - Natural Gas
 - Electricity
 - Oil and Petroleum products
- Timeliness M-2
 - Oil and Petroleum products
 - Natural Gas
- Timeliness M-3
 - Solid Fuels
 - Electricity

Questionnaires – other

- Electricity and Gas Price Regulation (Eurostat)
- Energy Prices and Taxes (IEA)
- SLT/CERT Annual Review of Energy Policies (IEA)
- Energy Efficiency (IEA)
- Combined Heat and Power (Eurostat)

Increasing requirement / demands

- Energy union and its governance
- Regulation on energy statistics
- Regulation on energy prices (natural gas & electricity)
- Quality reporting
- Data revision policy
- Data dissemination – new channels
- Fuel Quality Directive
- Emissions Trading Scheme

Energy Union



Energy Union Indicators

Energy Security, solidarity and trust	Internal energy market	Energy efficiency and moderation of demand	Decarbonisation of the economy	Research, innovation and competitiveness
Import dependency	Electricity interconnection capacity	Primary energy consumption trends	Gap between trends in GHG emissions in the non-ETS sector and targets	Share of energy and environment in total public civil R&D spending
Energy import supplier concentration index	Market concentration on wholesale gas and electricity markets	Primary energy intensity of the economy	RES share in gross final energy consumption	Low-carbon technologies patents
N-1 rule - gas infrastructure	Wholesale electricity and gas prices	Final energy intensity in industry	GHG intensity of the economy	Real unit energy costs for manufacturing sector
	Switching rates on retail electricity and gas markets	Final energy consumption per m2 in residential sector		
	Energy poverty index	Average CO ₂ emissions from new passenger cars		

Energy End-Use Disaggregation

Current disaggregation

- Households
 - Space heat, space cooling, water heat, cooking, other appliances
 - Surveys, modelling, estimation?

Proposed disaggregation

- Industry
- Services

Renewable Directive Targets

Combustible renewables

- biomass (wood energy, biofuels, crops, etc)
- biogas, landfill gas, sewage gas
- energy from renewable waste

Renewables for electricity generation only

- hydro energy and tidal power
- wind energy
- photovoltaics

Other thermal

- heat pumps (ambient)
- solar thermal
- geothermal

Transport

- biofuels (sustainability criteria)
- electricity use (rail, car, freight)
- gas (CNG, LNG, biogas)

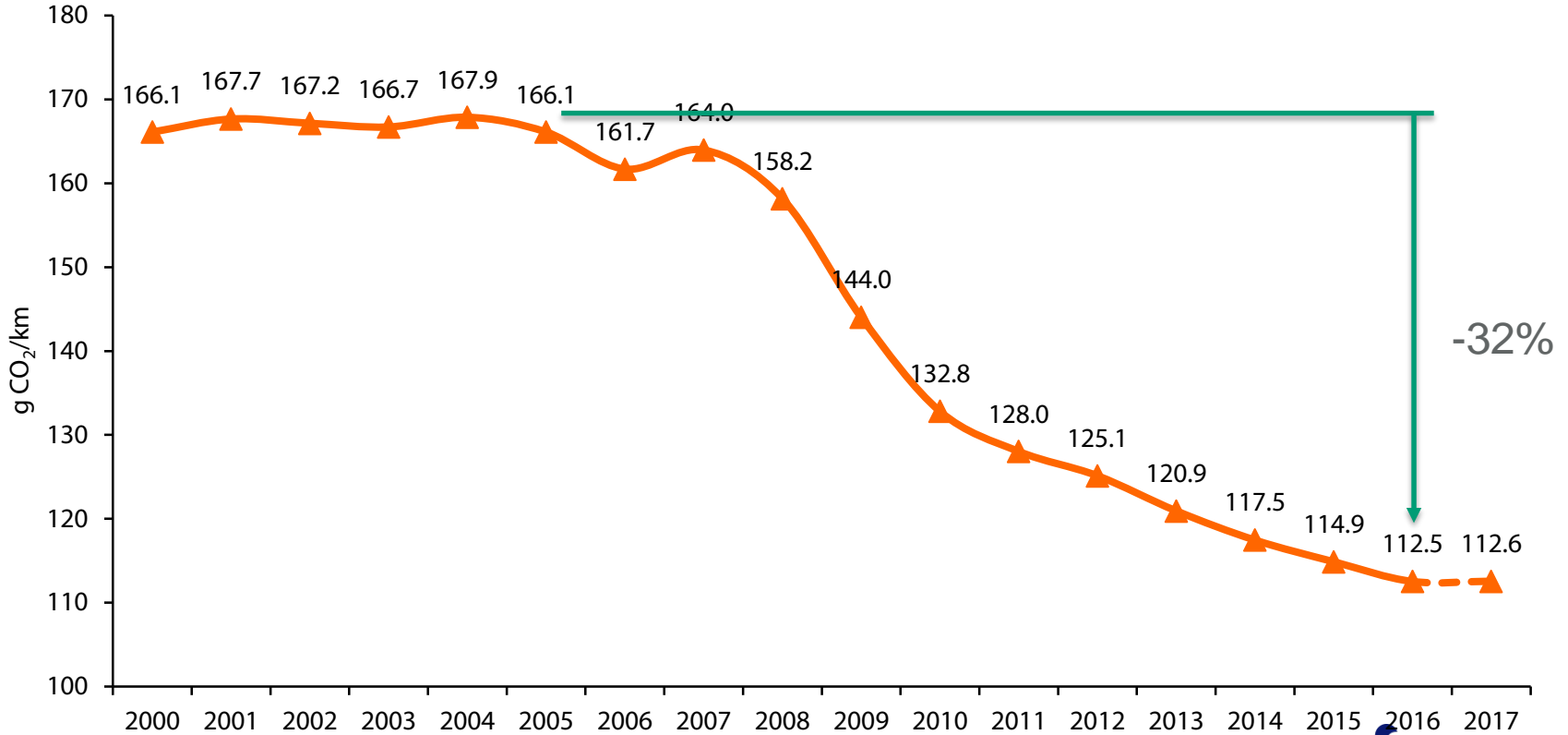
Efficiency Targets

- Increased level of detail required in energy statistics
 - Sub-sectoral disaggregation
 - Consumption by end-use
- Coherence with economic and activity data

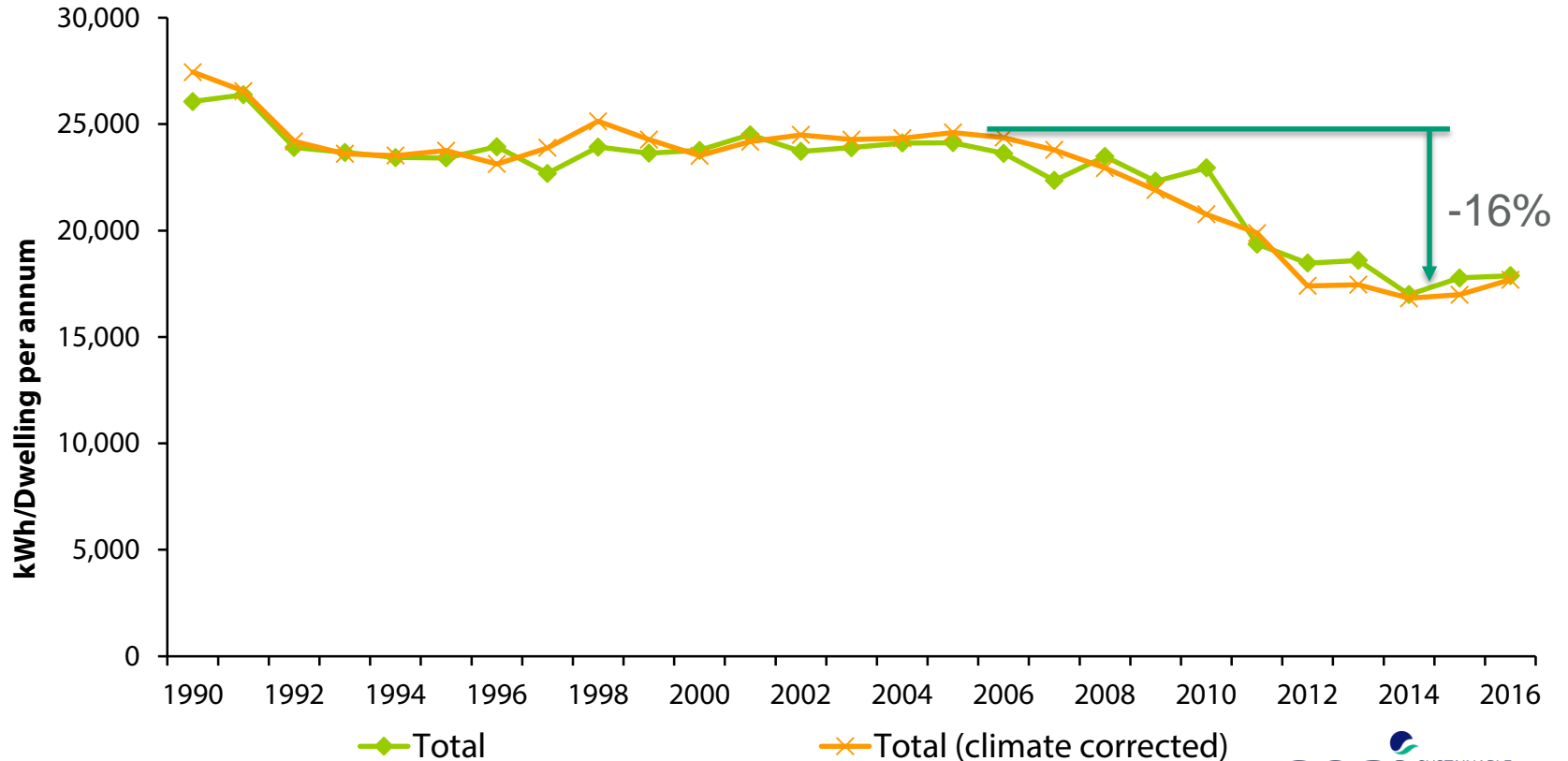
National Policy Support Demands

- Decision support
 - Private car taxation options
 - Household retrofit cost benefit analysis
 - Renewable energy support – electricity, heat, transport
 - Sub-national energy consumption – localised emissions etc
 - Data centres – energy supply availability and security
 - Electric vehicles – how to track consumption and fossil fuel displacement?
 - Alternative fuels – sustainability, emissions avoided
 - Smart Metering – access to metered network data
- Measure monitoring
 - Impact assessment – eg energy savings, emissions avoidance etc.
 - Renewable energy import avoidance
 - Estimates of value of avoided imports

Transport taxation policy support and impact



Residential measures impact



Other issues

- Energy Poverty
- Emissions
- Energy Security
- Timeliness
- Monthly data

Thank You



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