Roinn Cumarsáide, Gníomhaithe
ar son na hAeráide & Comhshaoil
Department of Communications,
Climate Action & Environment

Presentation on Ireland's Energy Efficiency Obligation Scheme

16 November 2016

Background to EEOS in Ireland

- Ireland is meeting Directive through combination of obligation scheme and alternative measures
- Obligation Scheme designed to deliver half of Directive mandated 1.5% energy savings target – 550GWh annual energy savings target for obligated parties
- Minister issues individual targets to obligated parties but scheme administered by agency – Sustainable Energy Authority of Ireland

Key Characteristics of Irish Scheme

- Obligation placed on all energy sectors – Final suppliers in electricity, gas & solid fuel. Energy distributors in oil sector
- Applies to all companies with sales above 600GWh per annum
- Enforced sectoral split – 75% non-domestic, 20% domestic, 5% energy poverty
- Individual company targets based on market share

	Sub Sectors			
	Non-residential	Residential	Energy Poverty	Total
Target Split	75%	20%	5%	100%
GWH	412.5	110	27.5	550GWh

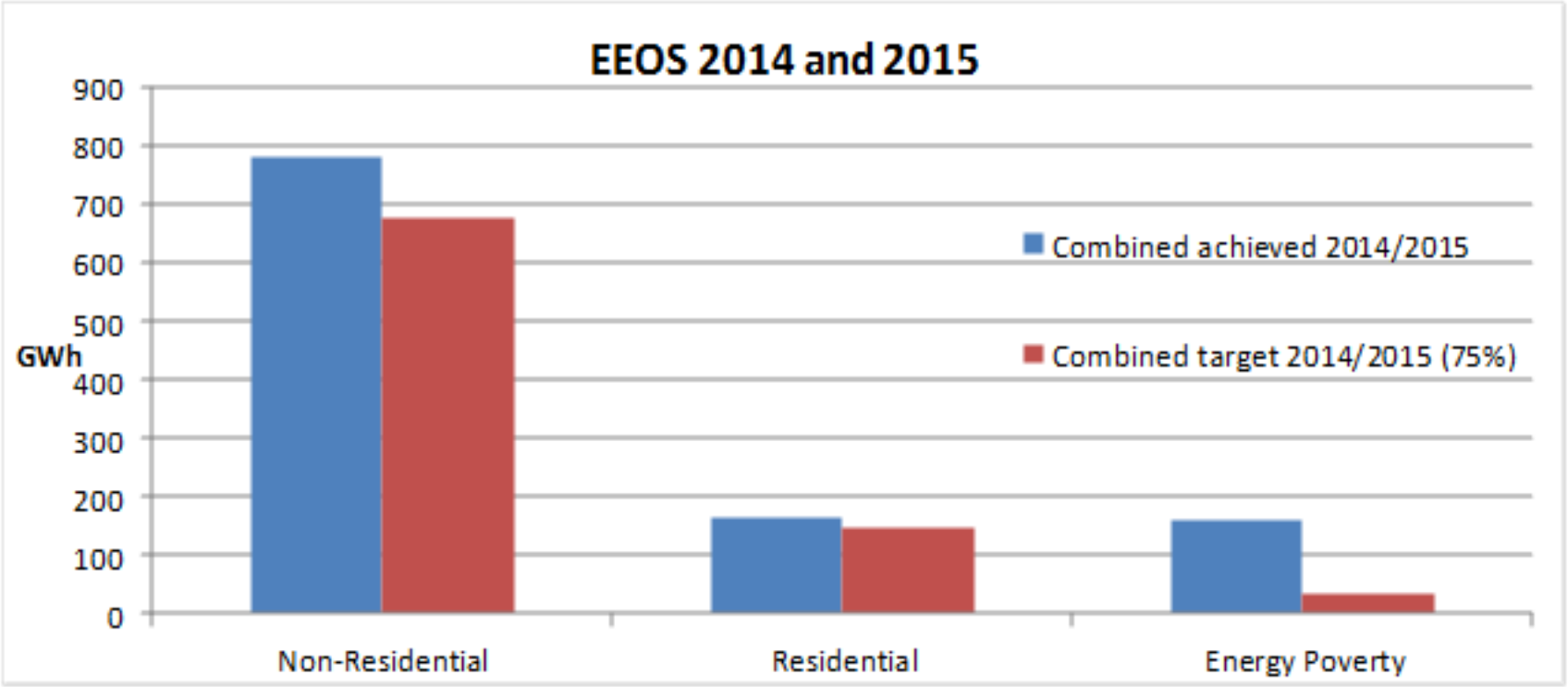
Key Characteristics of Irish Scheme

- Obligated parties have flexibility to meet targets - direct, through counter-parties, trade among obligated parties etc
- Each obligated party may “buyout” a portion of their target from Government
- Any failure to meet target and penalties apply

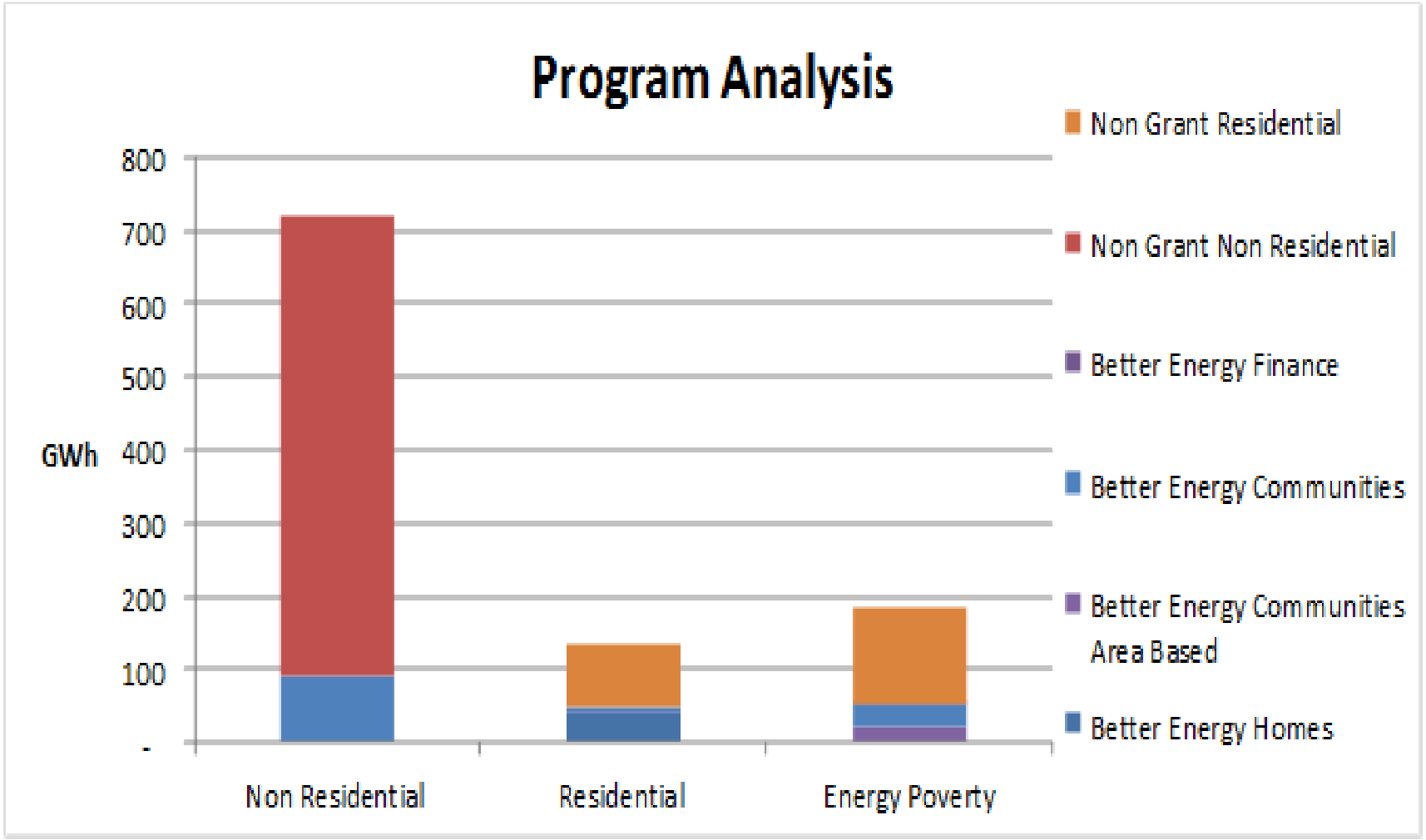
	Buyout / Penalty Prices (2014 – 2016)			
	Non-residential	Residential	Energy Poverty	Total
Target Split	75%	20%	5%	100%
GWH	412.5	110	27.5	550
Buyout Price	6.0c / KWh	20.4c / KWh	88.0c / KWh	13.0c
Penalty Price (buyout * 1.25)	7.5c / KWh	25.5c / KWh	110c / KWh	16.2c

Energy Savings Delivered

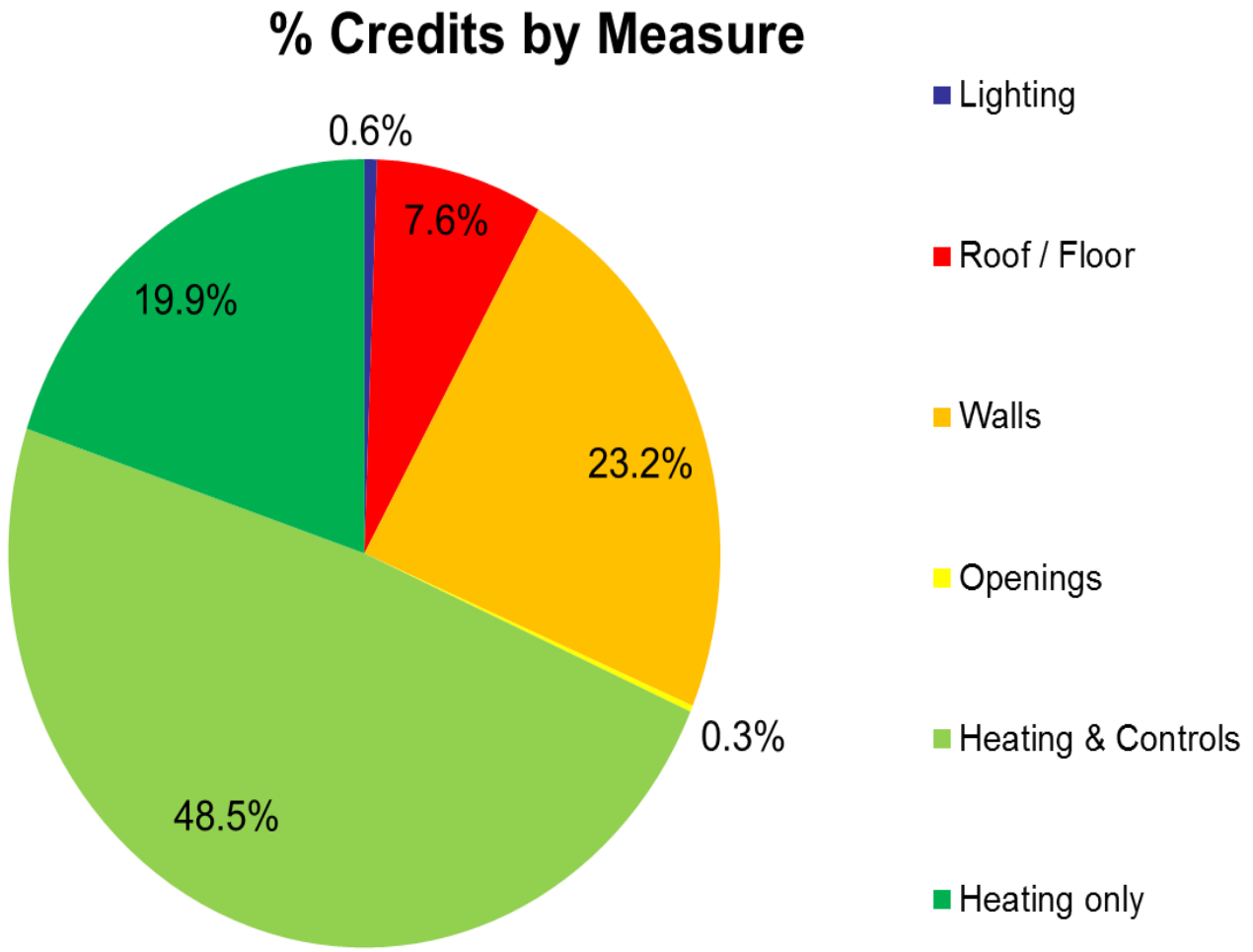
Accumulative target for 2014 and 2015 was 1,100 GWh. Energy savings achieved 1,110GWh.



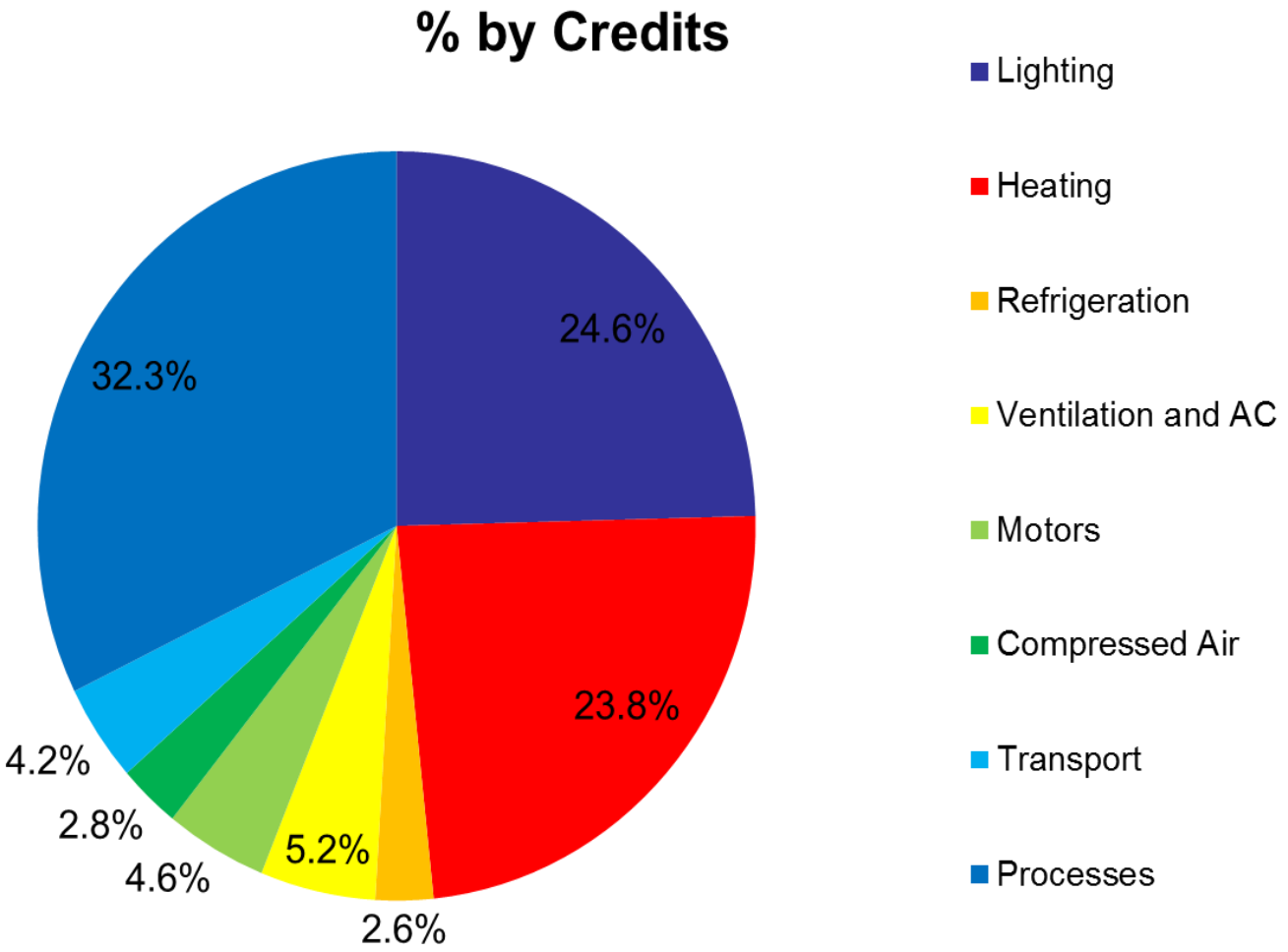
Source of Energy Savings



Typical Residential Energy Savings



Typical Non-Residential



Trading

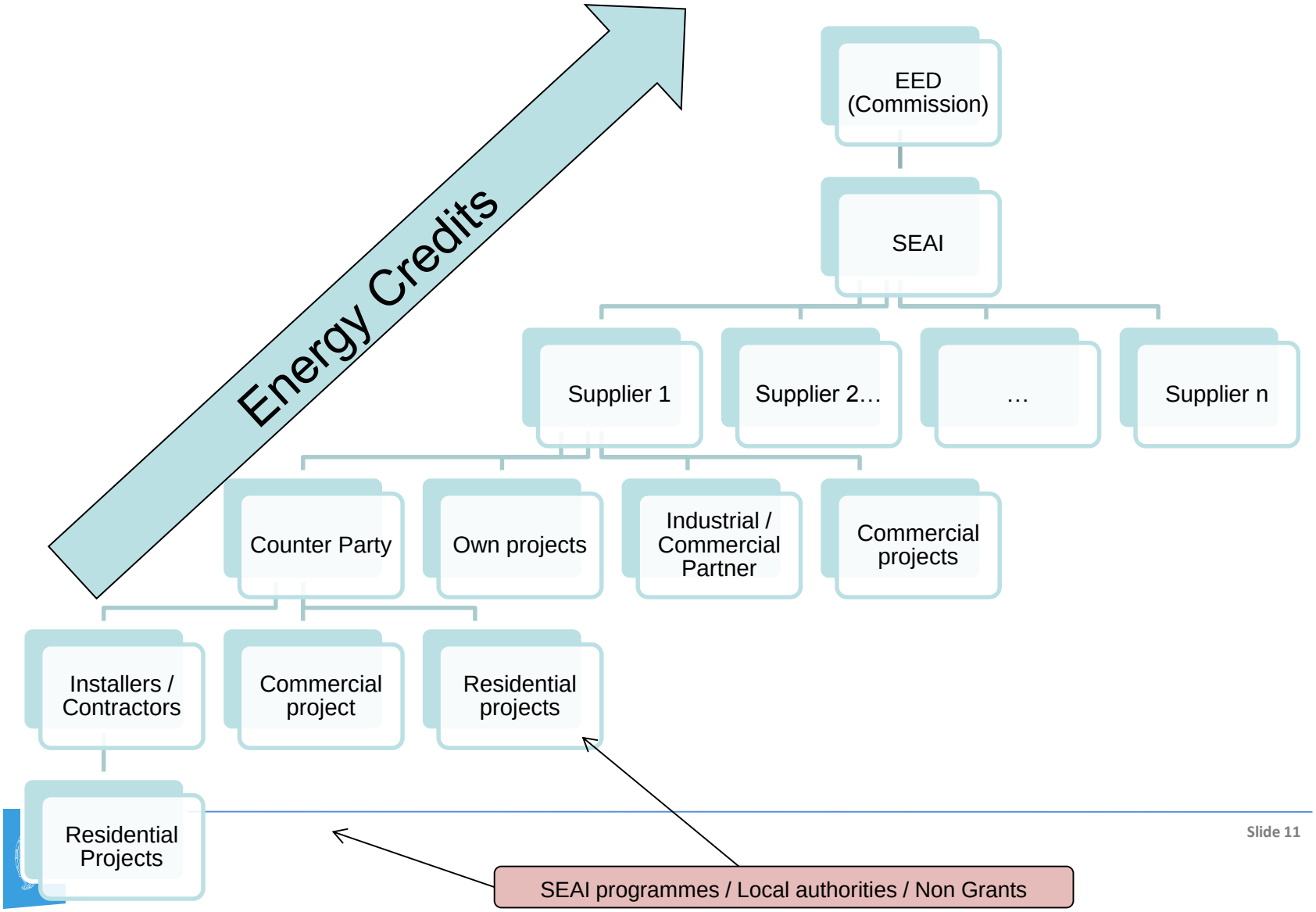
- No “white certificates” but obligated parties may trade
- Internally, excess credits may be reallocated from category to another category to meet sectoral targets but limits apply
- Residential credits can only be transferred to meet targets in the non-residential sector and energy poor credits can only be transferred to meet targets in either the residential or non-residential sector
- In addition obligated parties are permitted to exchange achieved credits with other obligated parties as long as they are within the same sector (e.g. residential to residential)

	Period	Inter Co. (kWh)	Inter Sector (kWh)
Number of Transactions	**2014**	11	0
	2015	8	6
Credits (kWh)	**2014**	10,241,161	0
	2015	19,781,947	31,459,825

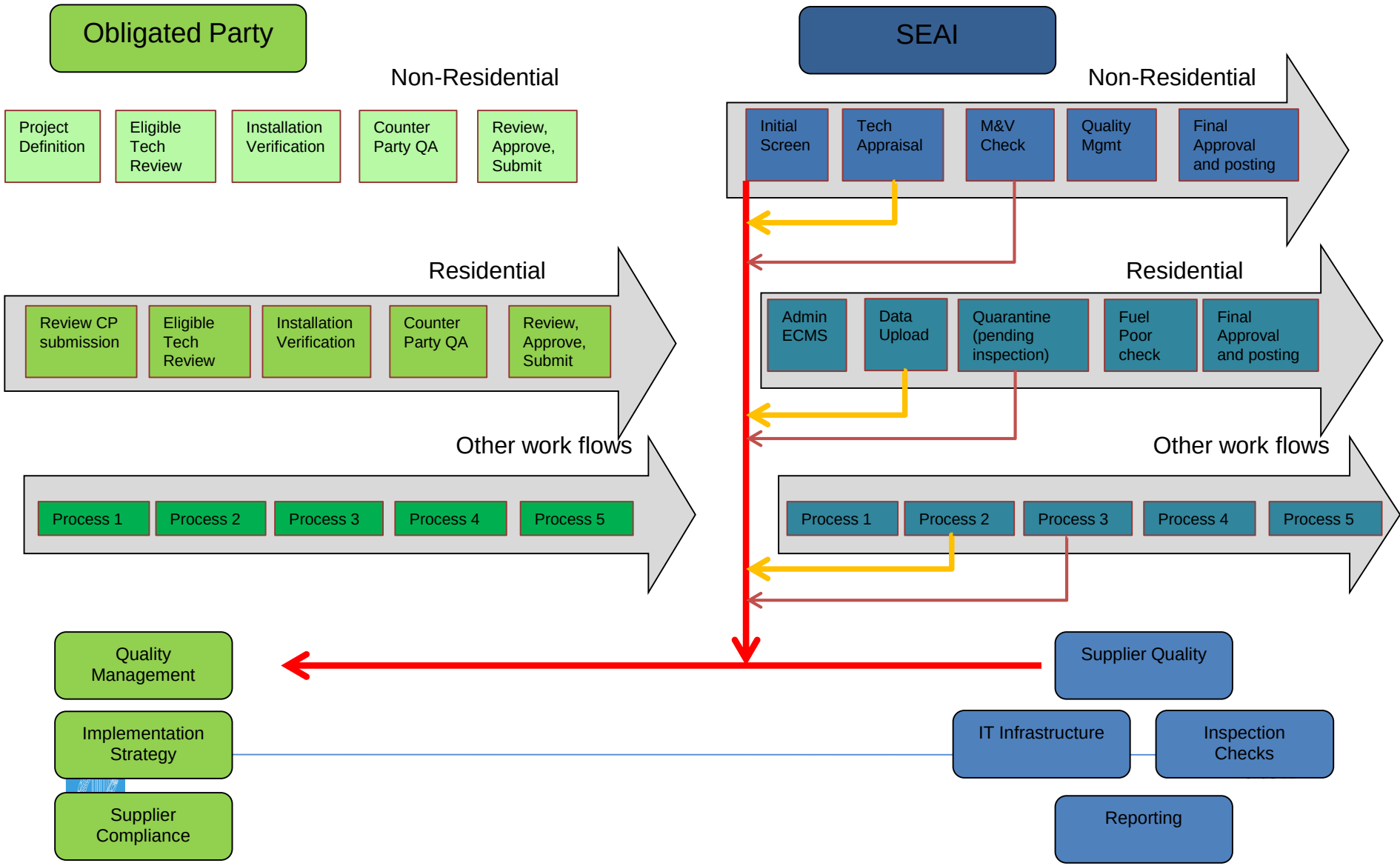
Monitoring & Verification

- Provisions around monitoring and verification set out in legislation with detail in guidance document for scheme
- In summary, all obligated parties are required to:
    - Establish a Quality Assurance Scheme;
    - Audit a statistically significant proportion of energy efficiency improvements;
    - Audit at least 20% of energy savings and include representative sample of projects types, size, sub-sector, location;
    - Ensure that all audits are conducted by an auditor or competent person who is independent of the works done;
    - Ensure that all issues discovered by an energy supplier or class of energy suppliers during an audit of the supplier's quality assurance regime shall be addressed and rectified;
    - Report any endemic failure or major issue discovered to the Sustainable Energy Authority of Ireland to agree on a remediation plan and any other actions that need to be taken.
- In addition, the Sustainable Energy Authority of Ireland is required to:
    - monitor, validate and audit a statistically significant proportion of the reported energy efficiency improvement measures carried out by an energy supplier or class of energy suppliers.

Chain of Responsibility



High Level Process Map



Auditing in Practice

- Individual targets based on market share 100% checks on PEP (document review, eligibility criteria etc)
- Up to 30% sent to external panel for evaluation: desk based, document and calculation checks, M&V report reviews and site visits.
- On-site audits of Supplier QS, focusing on document control and chain of custody, contractor audits, site visits, corrective and preventative action records
- Statistically significant (as determined by per ISO 9001 or equivalent) percentage of independent site inspections to ensure quality control.

Embedding Auditing

- SEAI host periodic workshops for obligated parties
- Encourage each to adopt a framework based on Demmings cycle of continuous improvement the Plan - Do - Check - Act (PDCA) Cycle - And aligned with ISO 50001 and ISO 9001
- Plan: establish the objectives of the system and plan the associated processes and resources required.
- Do: implement the process.
- Check: monitor the process and associated results and compare these to the planned objectives.
- Act: Take corrective action to improve the process.

Typical Records

Record	Purpose
List of Obligated Party Stakeholders	Identify roles and responsibilities for each stakeholder
Record of evaluation of legal compliance	Evidence of review of legal requirements and evaluation of compliance
Training Records	Training records of personnel completing an M&V plan or M&V report
Competency assessment	Demonstration of competency of suppliers and authors of M&V plans and M&V reports
Communications Plan	Evidence of planned communication activities
Client Communications	Evidence of communication of scheme activities with pertinent stakeholders
M&V Plan	Demonstration of planned savings method
M&V Report	Demonstration of savings achieved
Raw M&V supporting Data	Data obtained to support the M&V plans and reports
Engineering Calculations	Demonstration of Engineering Calculations completed to support the claim
Sustainability of savings assessment	Demonstration of assessment of risks associated with the credits
Internal Audit reports of the quality system	Evidence of internal checking of the quality framework
Management Review	Evidence of senior review of the quality scheme in order to ensure suitability of the scheme
Non conformance records	Demonstration of improvements to the quality management system

Review of Obligation Scheme

- Conducted public consultation on future of scheme in mid-2016
- Responses received from a mix of obligated parties (OPs), NGOs, commercial entities, representative bodies
- Common Themes:
  - Certainty for obligated parties
  - Carbon abated instead of GWh saved
  - Do/Don't use energy system for social policy
  - Clarity on the cost of the EEOS – past, present and future
  - Credit for EVs, fuel switching
  - Access to other Government programmes
  - Public knowledge of scheme

Changes to next phase of scheme

- Increasing obligation scheme target to 700GWh (27% increase)
- Lowering sales threshold for participation (240GWh annual energy sales)
- Lengthening obligation period to four years (2017-2020)
- Commissioning independent study to look at cost and transparency
- Introducing flexibility system to incentivise early action

What's Worked and What Hasn't

- Has brought energy companies to the table on energy efficiency
- Extremely effective at leveraging existing programmes
- Appears to be more cost effective than direct Government action only
- Less effective at delivering innovation
- Has not raised profile of energy efficiency

- Any further questions

- Ken.cleary@dccae.gov.ie