

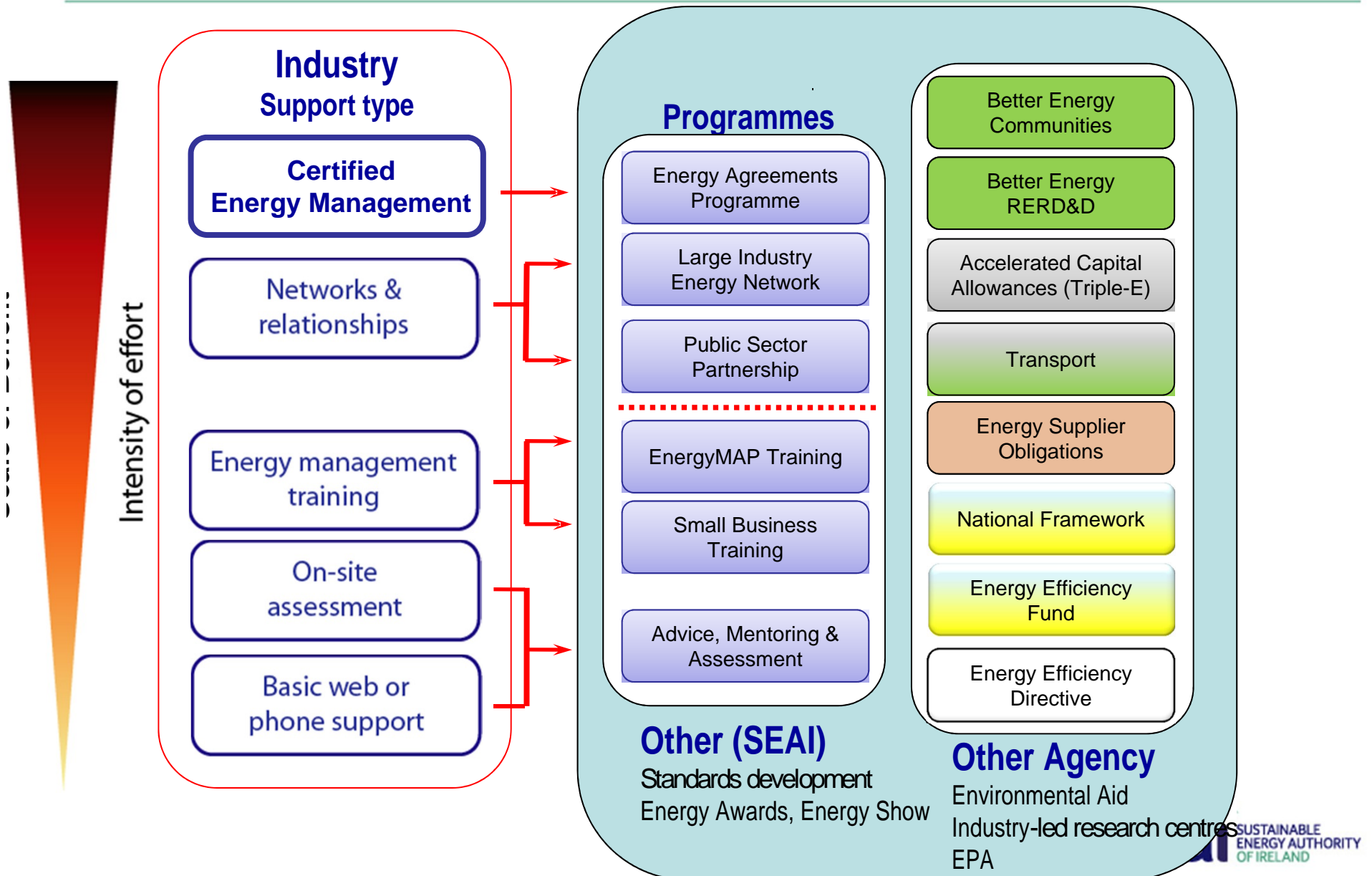
Energy Efficiency Options for Large Business

Presentation

- SEAI programme supports
- LIEN / Energy Agreements
- IS399 – new Energy Efficient Design Standard
- Energy Efficiency Directive – Article 7 & 8
- Other supports

SEAI Supports

EAI Programme supports for business



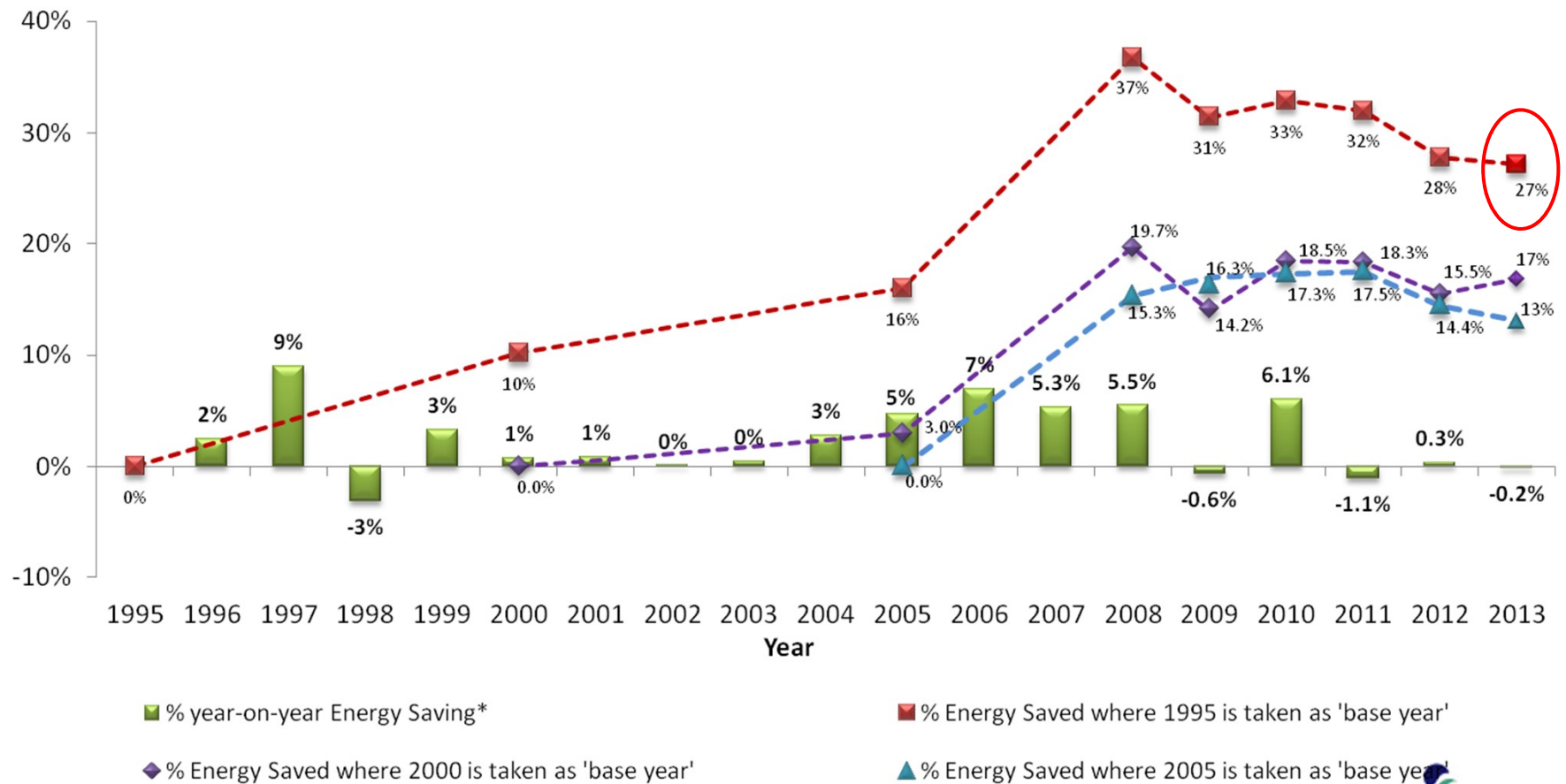
Large Industry Energy Network (LIEN)

- 166 companies - annual energy spend of **€1.1bn.**
- **17%** of the national **Total Primary Energy Requirement**
- **Since 1995**, have achieved an **improvement in energy performance of 27%**, in comparison to the year they joined.
- An estimated **770 GWh of energy savings** were achieved in 2013 through the implementation of specific energy saving measures by Network members.
- Represents **€32 million cost savings**

LIEN Historical Performance

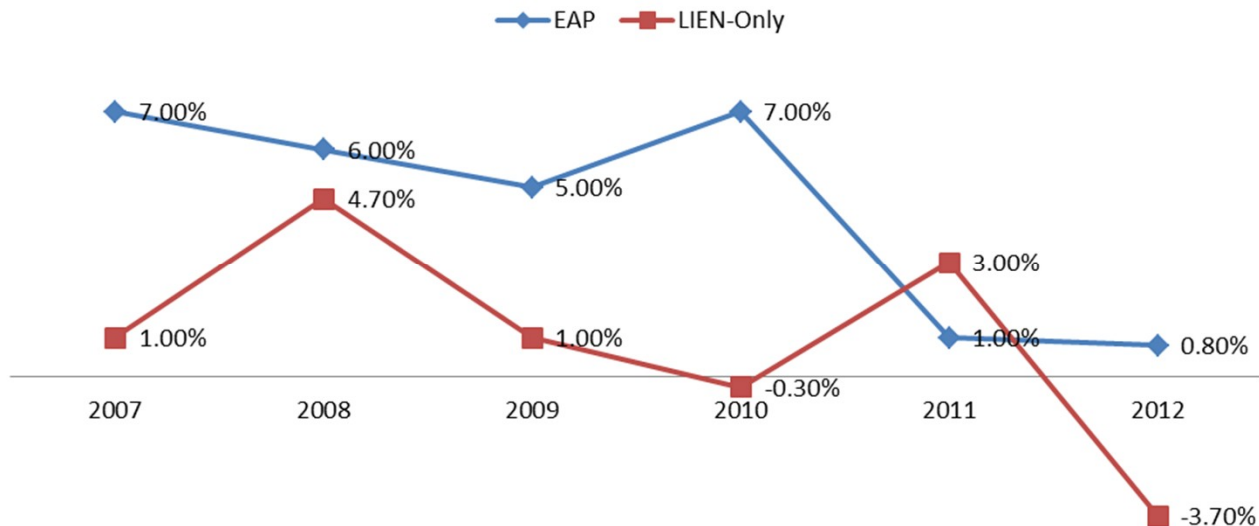
Large Industry Energy Network: 166 companies

LIEN Historic Energy Performance



Comparison of with/without an EnMS

Comparing Yearly Performance Improvement



- EnMS outperforming
- Continuous improvement year-on-year

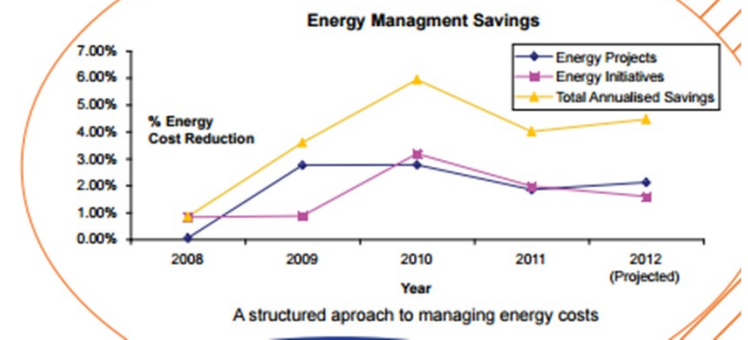
Large Industry Network



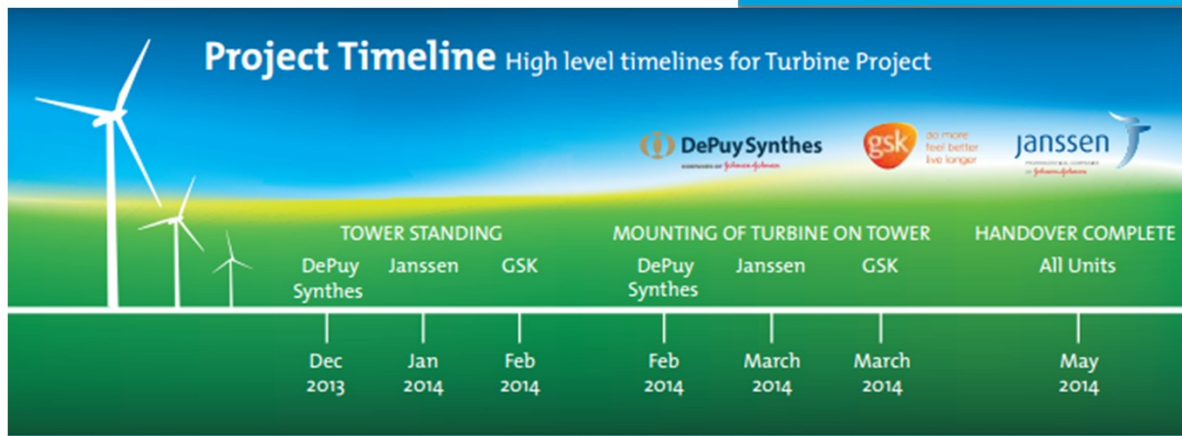
ISO 50001 Implementation



- 19 Locations and Transport Department Certified
- Each required to implement 4-5 energy improvement projects per year
- Verifiable energy savings over the period 2008 – 2011 in excess of 23 million kWh
- Projected savings for 2012 - 5.2 million kWh
- 40 million kWh savings attributed to energy initiatives since commencement in 2007
- CO₂ reductions of approximately 18,000 tons



Collaboration



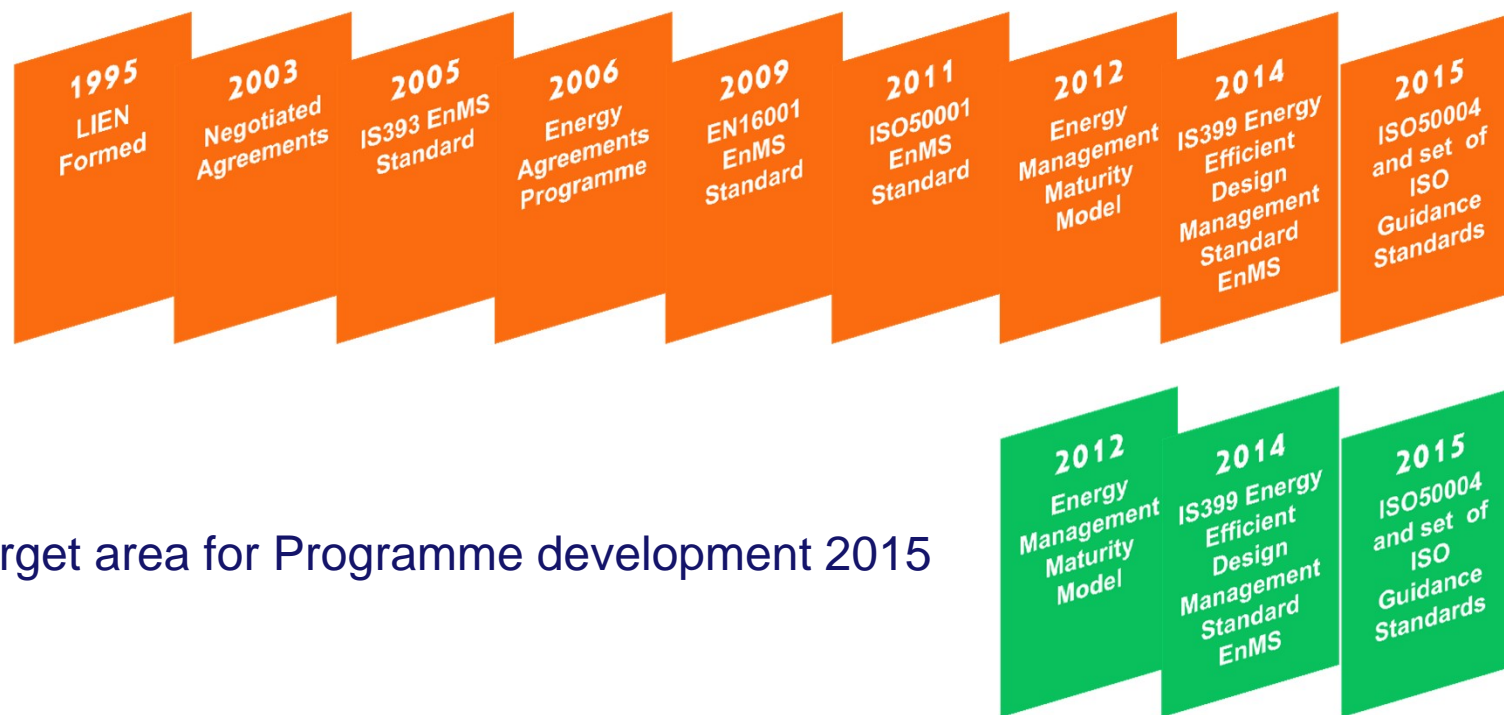
- Joint planning application
- 30% Reduction in Electricity costs
- 22,000 tonnes CO₂ saved annually
- €2 million savings

Standards Development

(ISO 50001 / IS399)

Energy Management - Historical timeline

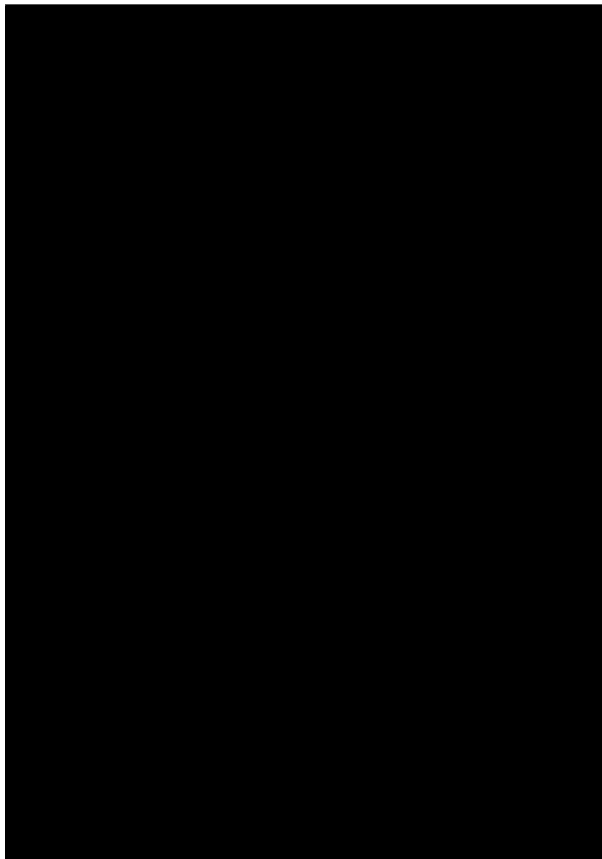
- Milestone developments / Body of Knowledge



Target area for Programme development 2015

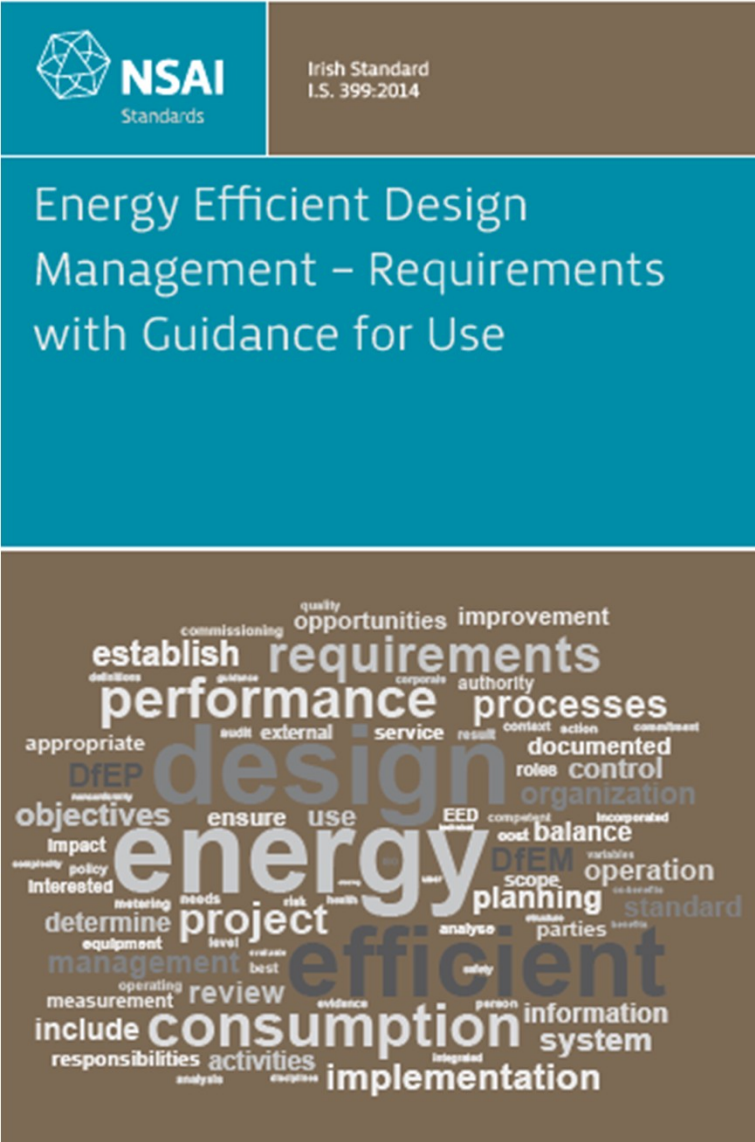
Highlighting New Irish Management System Standard !!

Why we developed a new standard?



2008, 2010

Company	Project	Annual Impact
Eli Lilly	New Biotech facility	30%* <small>* 2007, SEAI Industrial Best Practice Initiative Case Study</small>
Wyeth	Pharmaceutical Development Centre	51%* <small>* 2007, SEAI Industrial Best Practice Initiative Case Study</small>
Astellas Ireland	Blister Packaging Line	19%* <small>* 2010, SEAI EED Methodology case study</small>
Nypro	New Cleanroom upgrade project	23%* <small>*2011, SEAI 2010 LIEN Annual report</small>
Diageo	New Brewery	€2.5M* <small>* 2013, SEAI Energy Awards</small>



- I.S. 399 Energy Efficient Design Management – August 2014
- Assists the design, construction and management of projects to minimise energy use in their subsequent operation.

IS 399 - the Business case

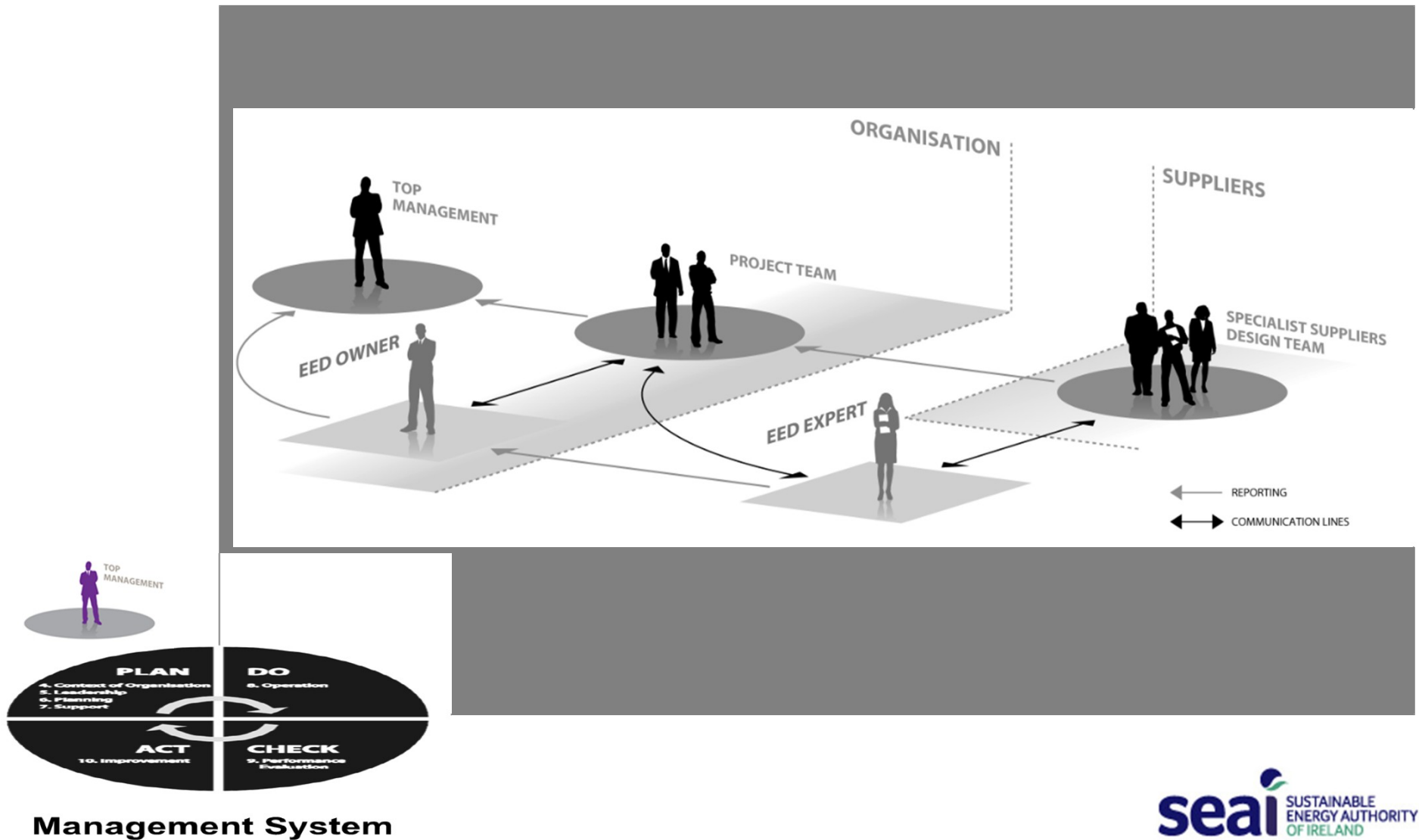
- i) **avoided energy consumption** typically 20% to 30% (or more)
- ii) the standard requires **Design for Energy Performance** and **Design for Energy Management** processes
- iii) new **organisational responsibilities** and structure applied to qualifying design projects.
- iv) **energy management processes** are structured throughout the full lifecycle of a project investment from conception through to retirement.

Application

- Relevant to all stakeholders
- Any sector, any organisation, any project



Design project organisation



National Energy Services Framework

Energy Services Framework – 4 elements

CLIENTS WITH FINANCIALLY VIABLE PROJECT(S)	ESCO	Market development
	SEAI SUPPORTS	SEAI Business Programmes Exemplar Programme Technical Assistance
	HANDBOOKS/GUIDES	Energy Performance Contracts Energy Performance-Related Payments Local Energy Supply Contracts
	FINANCING	the Fund Investment Banks EIB

Key considerations

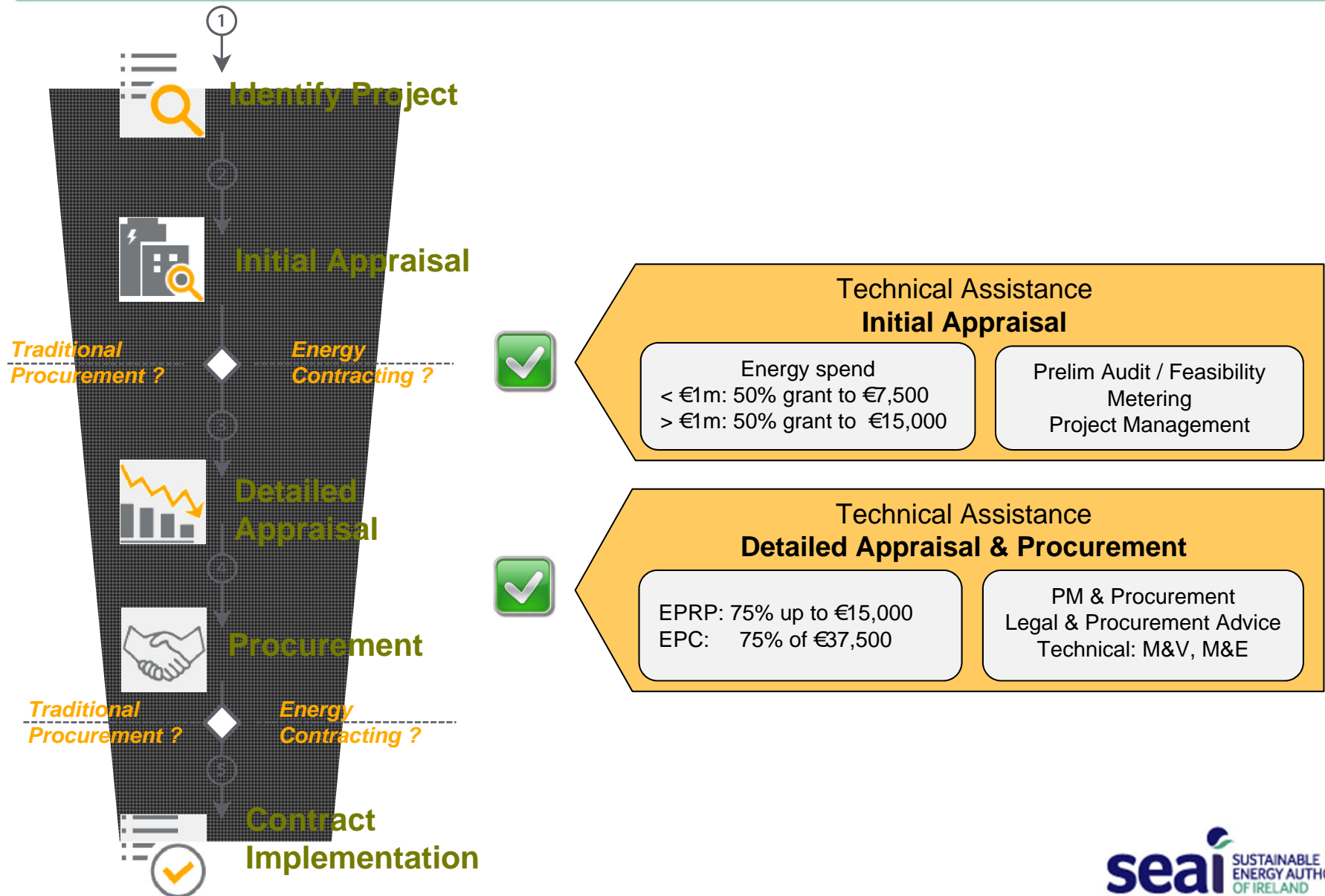


Energy Contracting – Project Development Process for success

Decide energy contracting route



Technical Assistance for Project Delivery



Energy Efficiency Directive

(Articles 7 and 8)

Energy Efficiency Directive – Article 7

Energy Efficiency Obligation Scheme

- The Directive imposes a legal obligation on Member States to achieve new savings each year from 1 January 2014 to 31 December 2020 of 1.5% of the annual energy sales to final customers of all energy distributors and all retail energy sales companies by volume
- The savings made towards this target are called 'Credits' and targets are set for suppliers based on market sales
- Not limited to their own customers when achieving targets
- **Suppliers are looking for projects to be associated with - €/kwh!!**

Who is Obligated...and at what level?

- **550GWh** overall supplier target per annum
- Eligibility threshold: Market Sales >**600 GWh p/a**
- Sub-Sectoral Targets

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

- What do you want in lieu for your energy saving credits?
Typical services:- Measurement and Verification (M&V), project management, metering, financial supports etc
- Supplier involvement must be demonstrably material to savings

Energy Efficiency Directive – Article 8

- **Article 8 Energy Audit Scheme**

- Non SME's must have an energy audit by 5th December 2015.
- **250** or more employees (on payroll) , **or** an annual turnover > €50m **and** an annual balance sheet total > €43m
- Obligation rests with the legal entity meeting criteria

- **Light touch** implementation – 2015 ..

- **Derogations**

- Greenhouse Gas Emissions Permit for that portion of energy use
- ISO 50001 Certification valid on 5th Dec for 70% of energy use
- If well advanced toward 50001 (Gap Analysis etc complete by Dec 15) – extension allowed to June 2016 for certification
- ISO 14001 Certification, specific energy component covering 70% of energy use and energy audit meeting the minimum rqmt

Energy Efficiency Directive – Article 8

Energy Auditors

- SI 426 requires SEAI ‘to register energy auditors under the energy audit scheme as qualified to carry out energy audits under the regulations
- Guiding principles being adopted:
 - Achieve appropriate balance between market access and credibility of Register of Energy Auditors
 - Independent objective assessment
 - Minimum qualification – relevant technical discipline (Level 7)
 - Relevant post qualification experience – seven years
 - Have an additional ‘title/registration’ - either robust assessment of energy experience/competence or this combined with examination

Energy Efficiency Directive – Article 8

Register of Energy Auditors

- Register to be established by (in) June
- Application process outlined by end May
 - Application form
 - Normal tax and insurance certificates
 - Degree / qualification certificates etc
- Adherence to Code of Practice

Other

- Strong guidance for enterprises – not all auditors will be appropriate in all circumstances - *'caveat emptor'*
- Internal personnel are eligible **IF** on the Register
 - Caveat of audit being signed off by two senior authorised signatories

Other opportunities

Accelerated Capital Allowances Scheme

ACA for energy technologies

- Write-off 100% of eligible purchases against profit Yr 1
- It's a tax incentive (not a grant!)
- Use Triple E Register – 10 categories, 52 technologies and over 12,200 products
- You are also getting ongoing energy savings



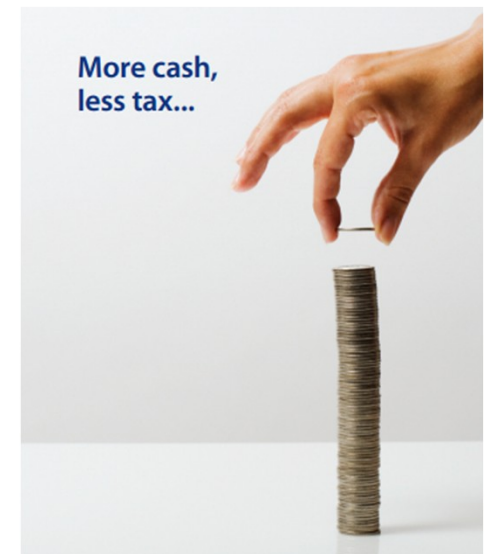
Welcome to the Accelerated Capital Allowance (ACA)

The ACA is a tax incentive for companies paying corporation tax and aims to encourage investment in energy efficient equipment. The ACA offers an attractive incentive whereby it allows companies to write off 100% of the purchase value of qualifying energy efficient equipment against their profit in the year of purchase.

The ACA now includes 52 technologies. Submissions are being currently invited from Manufacturers and Suppliers. To view the technology criteria please click [here](#)

Product Providers
Login Here

- Public bodies must now only procure from Triple E
- Must be a company, paying corporation tax.



THANK YOU 😊

Contact us at business@seai.ie

