



# Evaluation of Local Energy Agencies Performance

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*International Energy Program Evaluation Conference  
Paris 9-10 June 2010*

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# Purpose of local energy agencies (L.E.A.) in Europe

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1. To contribute to implementation and future development of EU, national, local and regional policies, strategies and legislation.
2. To create a critical mass of local activity and achieve local economies of scale.
3. To change citizens' behaviour and improve the quality of local/regional decision-making on implementation of energy efficiency and renewable energy systems.
4. To increase levels of investment in energy efficiency and renewable energy services at local and regional levels.



## **“Charter of Cork” (defining L.E.A.)**

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- to promote energy efficiency and renewable energy sources;
- sub-national administrative and policy level;
- political support from the regional and/or local authority or authorities within its area of operations;
- genuine autonomy in relation to existing bodies: own budget and administrative board;
- administrative board includes representatives of a variety of players involved in energy management, and in particular local elected representatives and representatives of consumers and local companies;



## “Charter of Cork” (cont’d)

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- has an operations team with at least two permanent members, together with the necessary logistical facilities (headquarters, premises, etc. ...) needed for its tasks and for maintaining its image as an impartial body in terms of energy options.
- its strategy is first and foremost directed towards energy demand from consumers.
- its activities are diverse: energy planning, consumer information and advice, assistance with setting up, funding, monitoring and evaluating energy management projects, and disseminating the results obtained.
- sufficient will and means for forging cooperation with other European agencies.



# Organisational modes

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- ranging from EA being actually **a branch** of a LA (an office, a department, a special unit),
- to fully independent **NGOs** where the participation of the LA elected in the management board is at personal level only.
- **most common**, the LA which funded the initial development of the EA, still makes a minor 'contribution' and assigns working contracts according to occurring needs.
- leaving it to the initiative of the LA director to apply for **external contributions** (regional, national or European), to extend the range of possible contract suppliers to other geographical areas or other fields of interest.



# Competing with private companies?

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**The answer: to avoid duplication.**

- When a suitable supplier of a service **already exists** there is no reason for the EA to engage;
  - conversely, when an area is **not covered** by any convenient provider, then it may be useful and appropriate for the EA to either
    - **offer this service** themselves, or
    - support the development of a **separate service provider** - provided that the area falls within the objectives of the EA itself.
- We call this aspect ***additionality of the EA.***



# Networking capacity.

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Capacity to involve local partners and resources in projects.

- A consultant usually performs its task under a bilateral agreement with the client;
- an EA is asked to contact the various stakeholders (professional/entrepreneurial associations, consumer/environmental associations, other Municipalities, groups of citizens) using its semi-official role of an organisation with a public objective.





# Classifying L.E.A. by output/impact

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The aim of this paper is to identify which elements an evaluation on outputs and impacts should concentrate on.



# Proposal of evaluation criteria.

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- 1. Sustainable energy quantitative realisations.**
- 2. Reached communication targets, incl. advice and behavioral change activities;**
- 3. Strategic achievements: partnerships, new sectors of interest, green economy,...**
- 4. Obtained multiplication of the results.**
- 5. Organisational achievements.**



## **Proposal of evaluation criteria.**

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**An evaluation format has been proposed,**

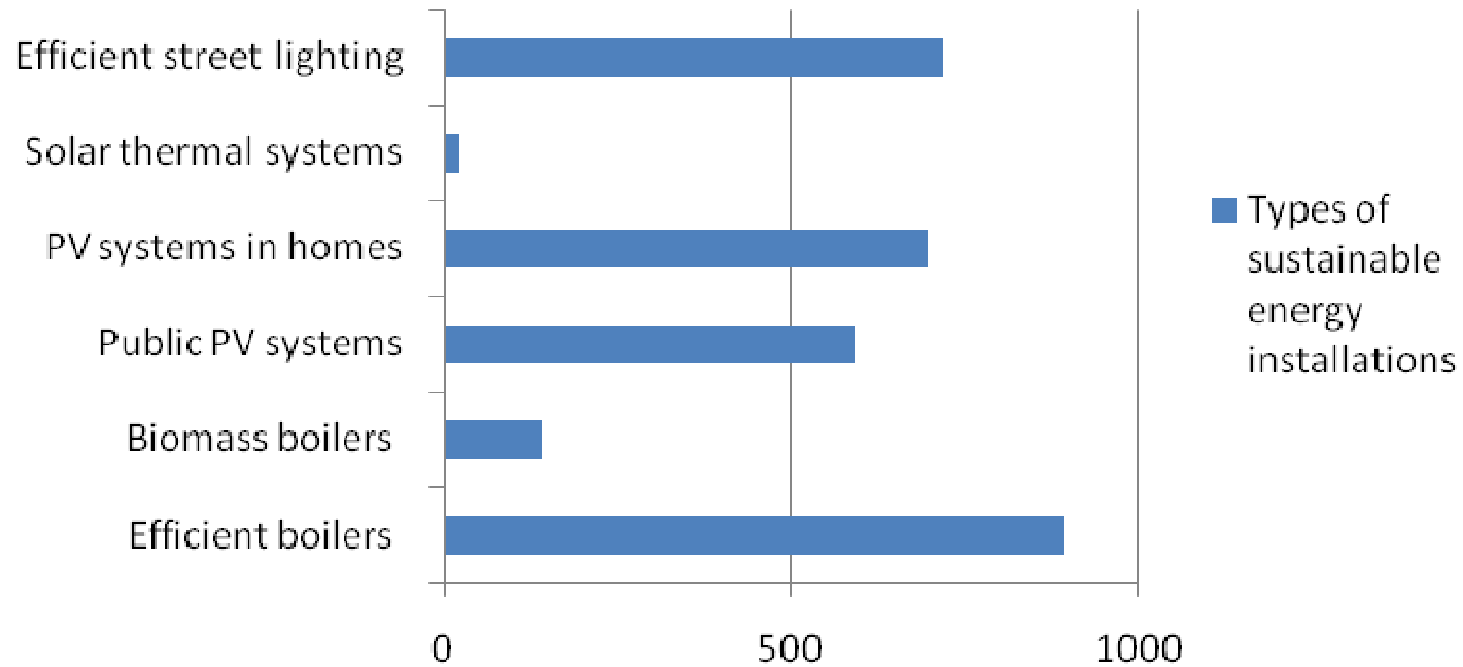
- applicable throughout EU,**
- allowing benchmarking,**
- using S.M.A.R.T. indicators,**

**And applied to the two energy agencies led by the authors.**



# Obtained results: AESS.

## Results in terms of avoided t of CO2 emissions





# Obtained results: SWEA.

Sustainable energy installations.	n.	Total capacity	Saved fossil energy <sup>1</sup> (MWh)	Avoided CO <sub>2</sub> <sup>1</sup> (tonnes)
Roof insulation	15863	n/r	2,658,730	156,987
Wall insulation	11513	n/r	1,649,270	97,383
Floor insulation	-	n/r		
Draught-proofing	1067	n/r	4,750	281
Hot water tank insulation	1553	n/r	8,400	496
Boiler replacements (energy efficient)	1257		38,140	2,252
Heating controls	2435	n/r	107,980	6,376
Biomass boilers	23	2600 (kW)	74,000	19,240
PV systems	40	190 (kWp)	4,150	1,784.5
Solar thermal systems	200	580 (kW)	10,160	2,641.6
Heat pumps	68	642 kW	11,100	2,886
Wind generators	6	26 kW	500	215
Hydro power generators	1	5 kW	950	408.5



# Comments

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AESS has used yearly amounts of avoided CO2

SWEA has approximated on basis of modelled savings over anticipated lifetime of measure.

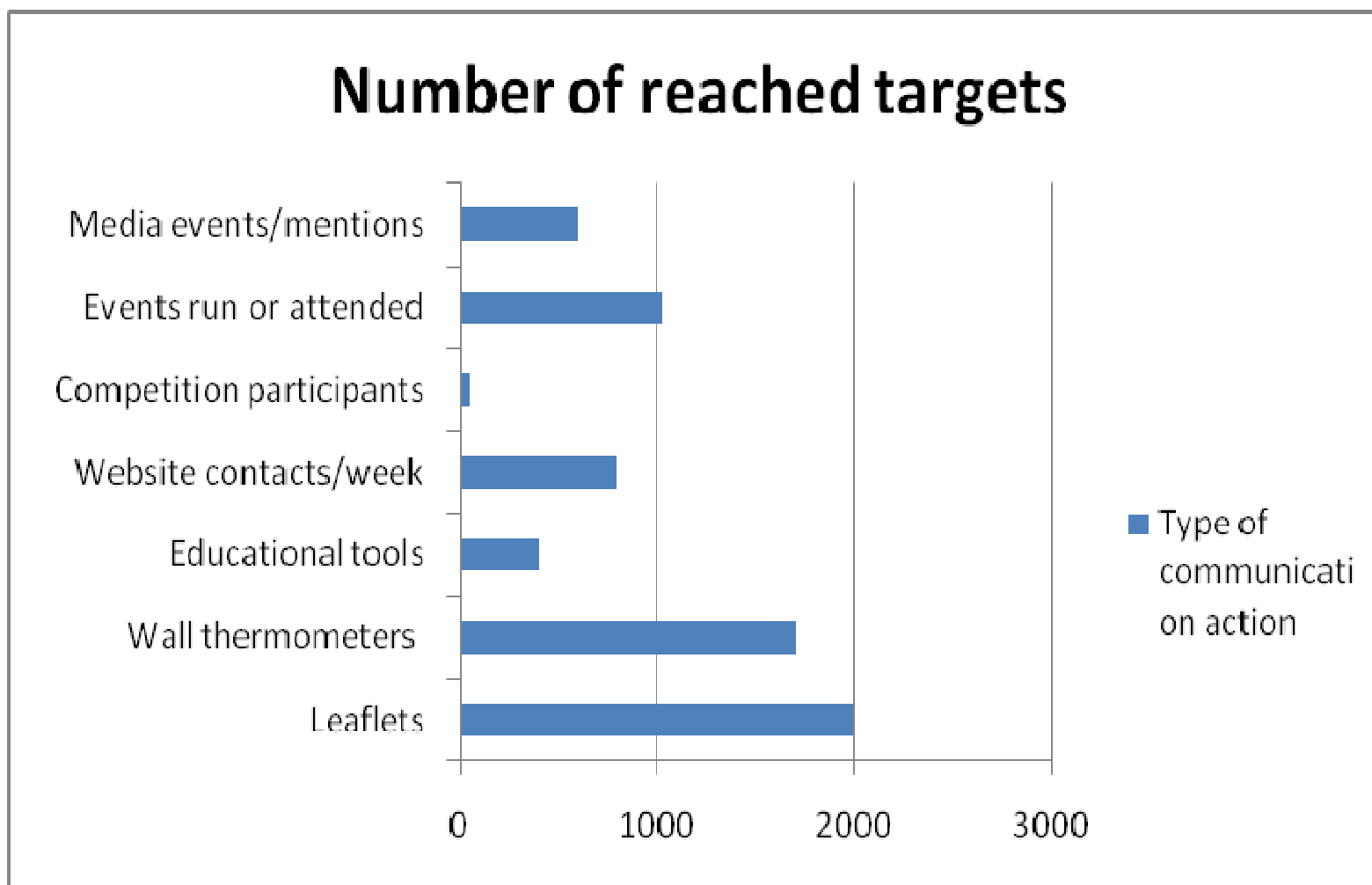
AESS had a staff of 4 – 10 people in the period, while SWEA 30 – 39.

AESS worked mainly for Municipalities.

SWEA for dwellers in public programmes.



# Obtained results: AESS.





# Obtained results: SWEA.

<b>Communication action</b>	<b>Nr. of initiatives</b>	<b>Nr. of published copies</b>	<b>Nr. distributed /website hits</b>
Events run or attended	260	-	
Advice surgeries held	420	-	
Leaflets	7	50,000	
Wall thermometers with info.	3	20,000	
Educational tools	5		
Website	6		
Competitions	20		
Media events/mentions	70		





# Comments

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AESS has used numbers of final targets (people, distributed copies of tools).

SWEA has used number of events, group meetings.

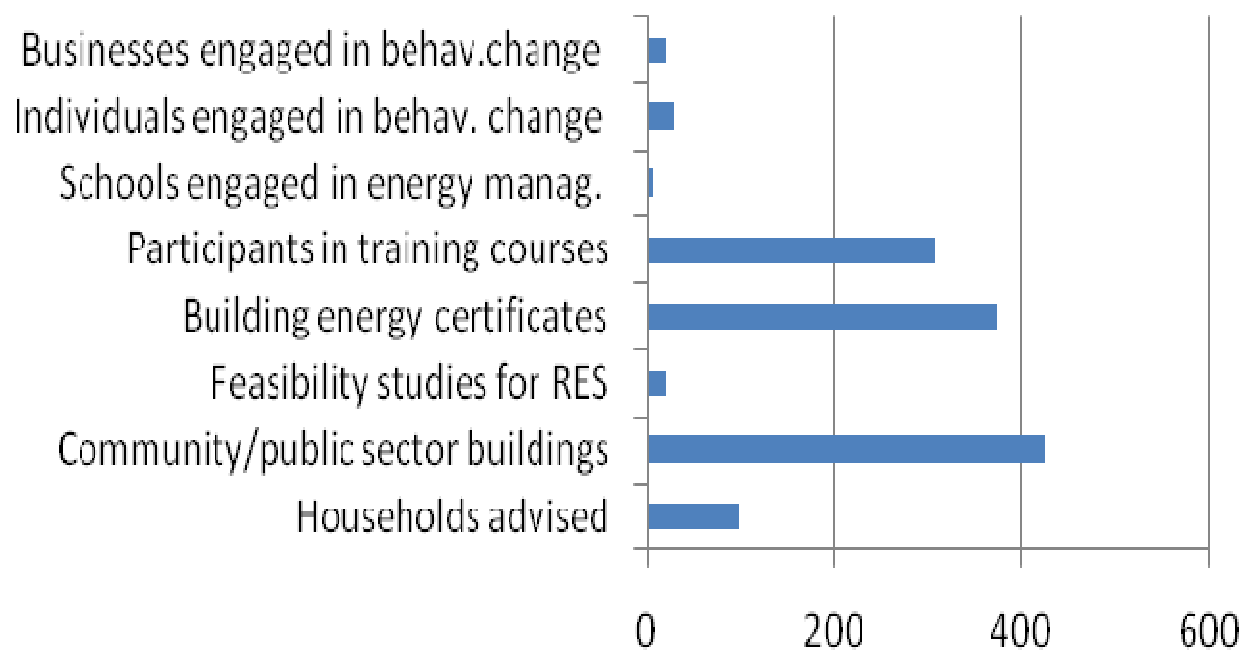
AESS has estimated the number of copies actually delivered.

SWEA has accounted number of publications (not the ones actually reaching people).



# Obtained results: AESS.

## Type of advice and behavioural change programmes





# Obtained results: SWEA.

Activities	Number	Results <sup>1</sup>	Anticipated outcomes <sup>1</sup>
Households advised	58,000	-	Financial Savings £1,885,000
Home energy surveys /reports	85,000	-	Savings of 178,500 MWh 39,695 tonnes CO <sub>2</sub> <sup>2</sup>
Businesses advised	132	Action plans agreed	Savings of 22 MWh, 8,800 tonnes CO <sub>2</sub>
Public sector buildings advised	9 prisons 35 schools		
Community buildings advised	150		
Feasibility studies for RES	150		
Schools engaged in energy management programmes	35		
Individuals engaged in behavioural change programmes	203		
Businesses /public sector organisations engaged in behavioural change programmes	5		



# Comments

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**AESS** was mostly active in training and building energy certifications.

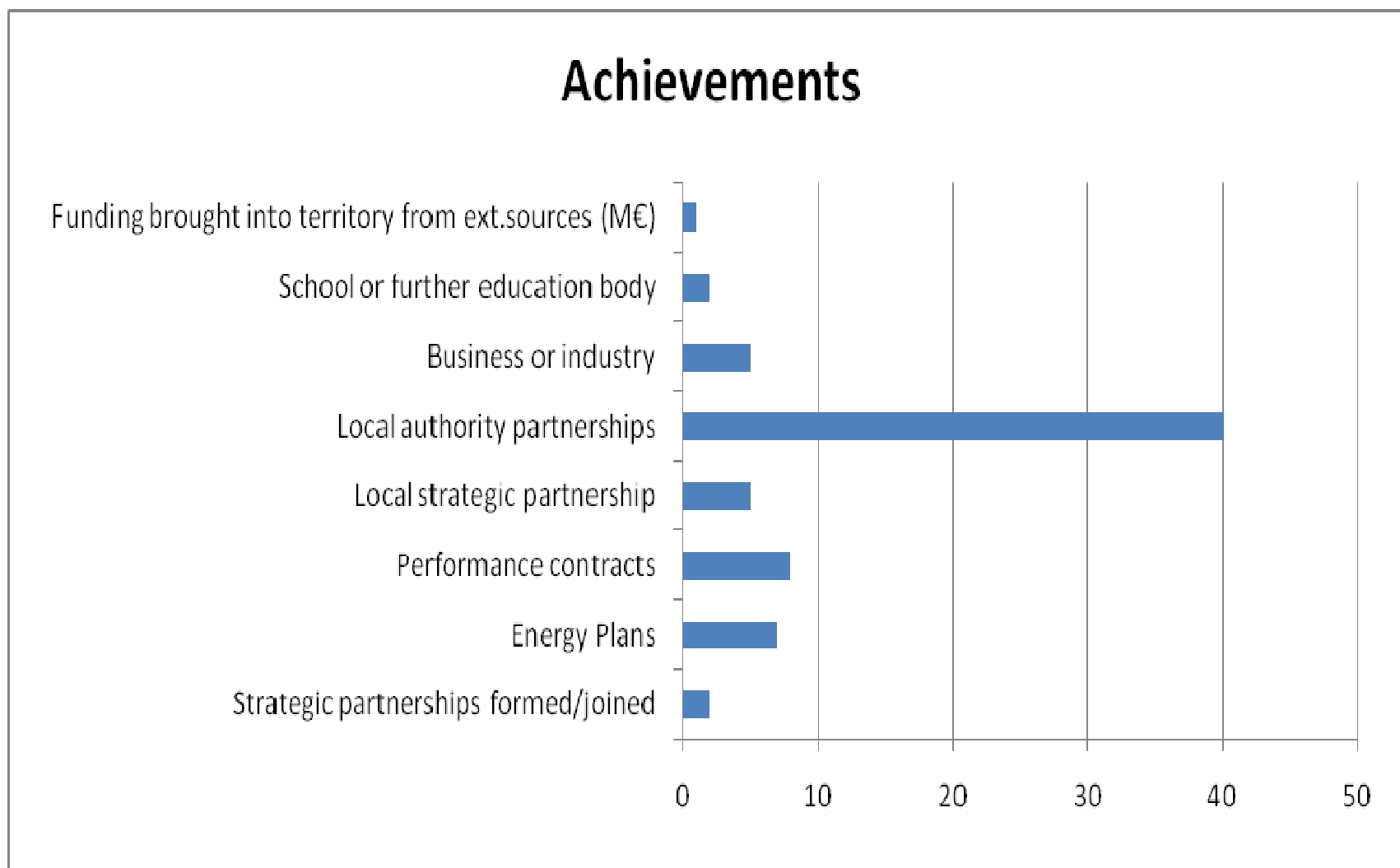
**SWEA** has a long term experience in advising end users (Energy Saving Trust calls in UK).

**SWEA** has calculated impact of advice, based on Energy Saving Trust 2001/02 figs:

- financial savings from all actions taken on advice given to homeowners **£32.50**;
- average financial savings for customers who have received a **written** report are estimated to be £38.08 per annum,
- with energy savings of **2.1 MWh**,
- and CO<sub>2</sub> savings of **467 kg** per household per annum.



# Obtained results: AESS.





# Obtained results: SWEA.

<b>Achievement</b>	<b>Details</b>
Strategic partnerships formed/joined	Leading role in development of: Gloucestershire Affordable Warmth Partnership, Gloucestershire Environment Partnership and Gloucestershire Environmental Education Partnership. Joined Regional Centre of Excellence Severn
Local strategic partnership	Gloucestershire Local Area Agreement: inclusion of 3 and 10 year targets for carbon and fuel poverty reduction
Local/regional authority or municipality	Climate change or energy policies for 6 Gloucestershire Districts
School or further education body	City and Guilds (National accreditation body whom we are affiliated to through 6176 and 6177 courses.



# Comments

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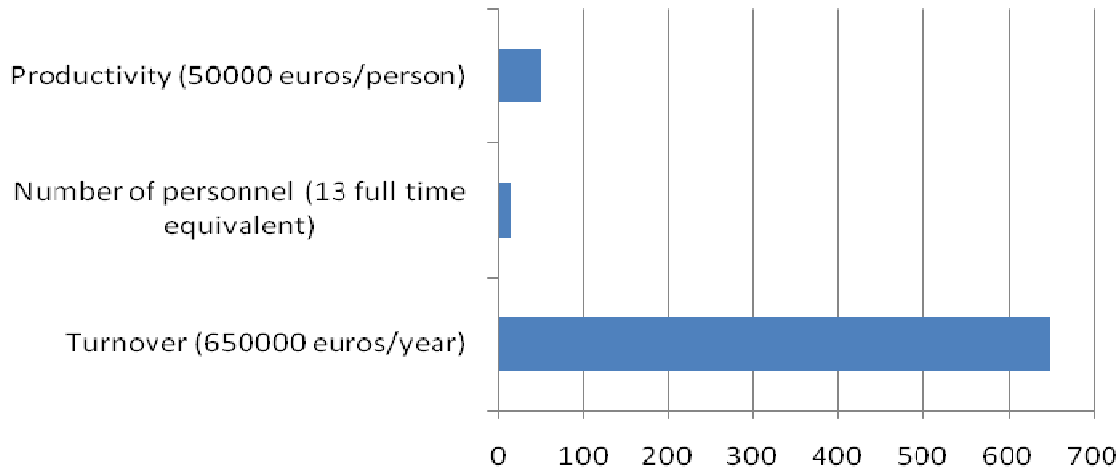
AESS reports performance contracts and attraction of public investment funds from outside.

SWEA reports collaborations at regional level for policy implementation.



# Comparison of organisational development.

## indicators of performance



Factor of 4 in turnover.  
Factor of 3 in personnel.

indicator	Number or detail
Turnover	£2.6m
Number of personnel (full time equivalent)	39
Performance standards achieved:	
Personnel	Working towards 'Investors in People'
Environmental	Working towards ' <b>ISO14001</b> ' Established method for monitoring of carbon emissions from own operations
other	Ashden Foundation Award 2006





# Conclusions

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1. An evaluation tool seems possible.
2. Results should be analysed considering several aspects.
3. A stricter definition of result expression is necessary.
4. To compare different L.E.A.s by relative indicators, personnel or turnover are not the best descriptor. Probably served population could be better.
5. A conventional value for “saving from advice” is useful, if derived from wide in-field studies.
6. A deeper investigation is recommended, and the IEE programme could be interested.



# Evaluation of Local Energy Agencies Performance

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**Thank you for your attention**

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