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Nicola Hogan, Project Manager

JISC funded **SUSTE-TECH**

project Sustainable ICT in
Universities & Colleges

SUSTE-TECH

Sustainable Technology in
UK Universities and Colleges

Principle Aims of the Sustainable ICT Project

To help Universities and Colleges across the UK become more sustainable in their choice and use of ICT systems

- To reduce ICT related energy use, CO₂ emissions, running costs
- Improving their “green credentials” : increase in college applications, help with funding avoid penalties.



Applying to Participate

- No hard & fast rules for participation, just submission of **Action Plan**
- **Mix & Match** of sustainable ICT, implement more than one sustainable option and all have proven successful in CO₂ emission reduction.



The

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Participants

Received 15 applications to participate

- 10 completed Suste IT tools
- 14 Action Plans

from..

- 7 Y&H , 3 Welsh, 5 South West Institutions..

Good mix of FE & HE inst.

- 10 HE , 4 FE, 1 mix...all with similar ICT problems.

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Results of Suste-IT Tool



- Suste IT Tool Results indicated that ..
- **Servers , PC's and Networks** are the main consumers of ICT related energy followed by **Imaging.**

lesser extent : **HPC's, Telephones, VC equipment.**

No surprise results, ...similar results regardless of size of institution



Participants Action Plans

Servers : 11 inst : Decommissioning,
Virtuilaising, consolidating servers or moving
servers off site

PC's & Monitors :14 inst tackling their PC &
monitor energy consumption by replacing
with Thin Client, PC power down, VDI desktop,
procuring for greener computers.

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Participants Action Plans

- **Networks** : only 2 institution tackling their networks,
- **Printing** :7 inst. are consolidating to MFD's, introducing charged or code printing, printing double sided by default
- **VC** : only 1 inst. will increase the use of VC
- **Telephones**: 1 inst. is addressing IP phone use



Participants Action Plans

Overall Energy and EF Reduction Policy :

Many are implementing a “general” energy management system,

- Automatic or timed powerdown of ICT equipment,
- creating awareness of campus wide energy use,
- recycling ICT equipment,
- green procurement,
- auditing and consolidating all ICT equipment
- lowering running costs & reducing waste



What do the Results Indicate?

In a nutshell :

- significant improvement in the past 5 years
however ..
- huge scope for improvement..
- Many of the changes are simple,
...just not being carried out!

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Barriers to Implementing Action Plan

1. Cuts in Funding !!

- Leads to staff shortages,
- Freeze on green initiatives

Solution : focus on quick wins

- PC powerdown, printing double sided by default, awareness campaigns, procuring for greener equipment **...are all free.**

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Barriers to Implementing Action Plans

2. Poor Communication!!

- Between ICT, Energy & Environmental Managers, and Facilities, Buildings & Estates and senior management...no follow through on initiatives.

Solution : **4M's**

- Do the **math**,
- **meet** with all stakeholders,
- **merge** ideas with technology and
- **make** IT happen.



Barriers to Implementing Action Plans

3. Institutional Restructure !!

- won't be able to stick to an Action Plan
- too much going on, hands are tied, not allowed to make plans

Solution

- Stick to Green ICT principals : do as much as you can
- your chance to audit your ICT equipment or start monitoring it.



Success Stories



Scotland Energy & Carbon Management Project

- WLC, 20% red. in data centre running costs (vented door).
- Stevenson College: Anticipating a cost savings of £70,000, in reduced energy costs since using server virtualization.





Success Stories

- QMU : Anticipating energy savings of 70,000 kWh via replacement of older PC's with thin client ones and automatic shutdown of non 24/7 PC hardware.
- Angus College : Reduced overall ICT energy by 15% through power-down



Final Message

Don't give up ! Energy Reduction is Important

- Save money
- reach carbon targets,
- improve institutions green credentials,
- green ICT makes life easier for everyone

Any questions ?





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