

IPCC predicts huge worldwide residential demand to keep cool



● Growing middle-class now able to afford technology

The warming climate – allied to improved economic circumstances – will drive rocketing demand for air conditioning, according to the UN Intergovernmental Panel on Climate Change (IPCC).

A growing international middle-class able to afford mechanical cooling will spend more money on the technology to offset the impact of rising temperatures, claims

the latest report from the United Nations-backed scientific body.

It expects demand for residential air conditioning in summer to rise by a factor of more than 30 by the end of the century – from approximately 300 terawatt-hours (TWh) in 2000 to 4,000 by 2050 and then onto more than 10,000 TWh in 2100, scientists said.

The report puts 75% of the growth down to increased spending power in emerging markets – the rest will result from the direct impacts of climate change.

The IPCC also predicts that heating demand in developed countries will fall as winters get warmer, but the potential negative impacts of climate change on global energy supply outweigh any such benefits.

The report also pointed out that 'thermal power plants', which provide about 80% of global electricity, are less efficient in higher temperatures and are more difficult to keep cool when local water supplies heat or dry up.

Egypt bans low-temperature air conditioning imports

The Egyptian government has announced a ban on the production and importing of air conditioning units that can be set to cool below 20°C, as part of an attempt to tackle a looming energy crisis.

Widespread power cuts are expected later this year because of lack of investment in energy infrastructure following the country's political upheaval. Power generation in Egypt is largely dependent on natural gas, which is now in short supply, according to Reuters news agency.

The government predicts electricity production will fail to meet surging domestic demand once the hot summer months begin. The ban on some types of air conditioning will help to ease 'the burden on Egyptian families' according to Trade, Industry and Investment Minister Mounir Fakhry Abdel Nour.



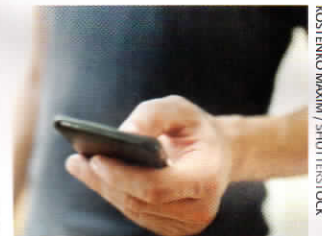
Smartphone app ready to control buildings

Building managers should be able to take closer control of their own lighting and air conditioning via a new smartphone app, according to the manufacturer Philips.

An integrated view of a building's occupancy patterns and energy usage will enable more informed decision-making and improved levels of energy and operational efficiency, the company said.

The app uses Power-over-Ethernet (PoE) to connect office lighting fixtures to a building's IT network. The lighting system acts as an information 'pathway', enabling workers to control and access lighting and other building services, including air conditioning, via their smartphones.

The system can also be fitted with sensors to capture anonymous data on room occupancy, temperature and humidity, so facility managers can use real time and historical data to determine temperature and lighting settings based on occupancy patterns and energy use.



Getting on board with BIM

A survey has found that 70% of those who use building information modelling (BIM) believe it has given them a competitive advantage.

However – while awareness of BIM is almost universal, at 95% – only 27% of respondents said they 'trusted what they hear about BIM'. More than 1,000 people from across the construction industry took part in the annual NBS National BIM survey, and 54% said they now use BIM. Among the benefits they cited are: improved productivity; increased efficiencies; better coordination of information; and higher profitability.

CIBSE

JOURNAL



The official magazine of the Chartered Institution of Building Services Engineers

May 2014



EMERALD ISLE

Dublin Symposium
focuses on sustainability

CLASS OF YOUR OWN

Engineers go back to
school to promote
building services

Natural HABITAT

Atelier Ten's ventilation strategy
for WWF's new headquarters