

The Energy Echo

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The Energy Management News Bulletin



Gulf Stream shutdown



A new COLD war?
ex soviet spats highlight the dangers of relying on imported fuels

Tbilisi, Georgia: As thousands of people struggle to keep warm in freezing conditions others wave placards outside the Russian army headquarters emblazoned with "GasPutin". The Georgian president, Mikhail Saakashvili accuses Moscow of sabotaging 2 gas pipelines and an electricity power line cutting energy supplies to Georgia and Armenia. Russia dismisses the claims as hysterical, but these events come mere days after it's high profile dispute with Ukraine over gas supplies, which lead to the turning off of gas to Ukraine for a time.

As Russia and Ukraine now appear to have grudgingly agreed on prices for gas for the time being and supplies have been restored the continuing shortages in parts of Georgia, help to highlight the dangers of over reliance on fuel imports and that diversification of energy supplies is essential.

The UK may not rely on Russia for any of its gas supplies but as the world's third largest natural gas consumer, producing around 40% of our electricity from gas power and with North Sea gas reserves predicted to run out within 10 years we will have to import increasing amounts of gas from elsewhere.

Hopefully we will be able to source gas from stable countries such as Norway, but we must also not just look at managing supplies for energy but also **demand** – greater energy efficiency and utilisation of local renewable power sources should be used to ensure **self sufficiency** and **security of energy supplies**.

The Energy Management Unit is endeavouring to move Bristol towards these aims with it's forthcoming biomass heating schemes at Blaise plant Nursery and Florence Brown School and the proposed wind turbine scheme at Avonmouth and we continue to invest in building fabric to improve energy efficiency.

“global warming” may lead to a colder UK



will it be like this? ... or this!



The North Atlantic conveyor which brings warm waters to Northern Europe (including the British Isles) has afforded us much milder weather conditions than other areas at similar latitudes e.g. Nova Scotia.

The key is the Gulf Stream. After it emerges from the Caribbean, it splits in two, with one part heading north-east to Europe and the other circulating back through the tropical Atlantic. As the north-eastern branch flows, it gives off heat to the atmosphere, which in turn warms European land.

If Arctic ice melts due to rapid warming linked to humans wasteful use of energy and Arctic rivers flow faster due to increased global temperatures - trends which have both been documented - the northern oceans become less saline.

Less salinity means a lower density; the waters then cannot sink and

return southwards, so the conveyor weakens.

Computer models of climate have regularly predicted that the North Atlantic conveyor may well reduce in intensity or even turn off altogether

Researchers from the UK's National Oceanography Centre say currents derived from the Gulf Stream are weakening, bringing less heat north.

What are the implications for the British Isles – the irony is that global warming may lead to colder weather. We could see a return to very harsh winters such as those seen between 1350 and 1850 during "The Little Ice Age" when the Thames regularly froze over.

Estimated annual UK CO₂ emissions from devices left on standby:

- Stereos - 1,600,000 tonnes
- Videos - 960,000 tonnes
- TVs - 480,000 tonnes
- Consoles - 390,000 tonnes
- DVD players - 100,000 tonnes
- Set-top boxes - 60,000 tonnes



TURN THEM OFF!

(Source: Energy Saving Trust)

Help save energy ...



EMU on the move



Now part of CSS, The Energy Management Unit is moving next door into Property Services, B-Bond after 9 years at CREATE

For further information T: 0117 922 4436 or www.bristol-city.gov.uk/energymanagement