

SWINDON CLIMATE ACTION NETWORK

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www.swindonclimate.org.uk

send contributions to e-digest@swindonclimate.org.uk

Polar ocean 'soaking up less CO₂'

By Paul Rincon
Science reporter, BBC News

One of Earth's most important absorbers of carbon dioxide (CO₂) is failing to soak up as much of the greenhouse gas as it was expected to, scientists say. The decline of Antarctica's Southern Ocean carbon "sink" - or reservoir - means that atmospheric CO₂ levels may be higher in future than predicted. These carbon sinks are vital as they mop up excess CO₂ from the atmosphere, slowing down global warming. The study, by an international team, is published in the journal Science. This effect had been predicted by climate scientists, and is taken into account - to some extent - by climate models. But it appears to be happening 40 years ahead of schedule. The data will help refine models of the Earth's climate, including those upon which the predictions of the Intergovernmental Panel on Climate Change (IPCC) are based. Of all the CO₂ emitted into the atmosphere, only half of it stays there; the rest goes into carbon sinks. There are two major natural carbon sinks: the oceans and the land "biosphere". They are equivalent in size, each absorbing a quarter of all CO₂ emissions. The Southern Ocean is thought to account for about 15% of all carbon sinks.

Sink efficiency

It was assumed that, as human activities released more CO₂ into the atmosphere,

ocean sinks would keep pace, absorbing a comparable percentage of this greenhouse gas. The breakdown in efficiency of these sinks was an expected outcome, but not until the second half of the 21st Century. Lead researcher Corinne Le Quere and colleagues collected atmospheric CO₂ data from 11 stations in the Southern Ocean and 40 stations across the globe.

Churning waters

Oceans store much of their CO₂ in deep waters. But, explained Dr Le Quere, "as the winds increase, the water in the ocean mixes more". The British Antarctic Survey (BAS) scientist added: "The CO₂ that would normally be in the deep ocean and would just stay there instead gets brought up to the surface and outgasses to the atmosphere." The ocean surface becomes saturated with CO₂ and cannot take up any more from the atmosphere.

Click here for full Story

<http://news.bbc.co.uk/go/pr/fr/-/1/hi/sci/tech/6665147.stm>

A 'LUSH' Contribution

Lush, the ethical cosmetics company, has donated £1,000 to SCAN for its campaigning work. Last April, Lush launched 'The Charity Pot' <http://tinyurl.com/26h29u> - a unique product where 100% of the money raised goes to good causes. Our good friends at Transport 2000 nominated SCAN for the donation. Although SCAN is local, we are getting national recognition!

A list of charities supported by Lush <http://tinyurl.com/ykqwvj>
The Lush shop in Swindon is on Canal Walk.



FRESH HANDMADE COSMETICS



Streetlights around town burning brightly all day long

If you would like to save a few grammes of CO₂, these faults can be reported to the Council, either by free telephone number: 0800 015 0096 This is manned during office hours and has an answer machine at other times. Or by clicking on this link to report a problem,

<http://www.swindon.gov.uk/yourcouncil/reportaproblem/streetlightproblem.htm>

Upcoming Events

- ◆ Friday June 1st Tour 12.30-1.30 pm tour of National Trust building 'Heelis'. Book on info@swindonclimate.org.uk
- ◆ Sunday 3rd June at 10.30am The 11th Castles Bike Ride. This is a leisurely family cycle-ride which starts at Croft Sports Centre and takes in some of England's oldest roads. The route includes The Ridgeway and Barbury Castle with some breathtaking views. Further information is available from Jill Greenaway on 01793 521630 or from www.castlesbikeride.co.uk.
- ◆ Wednesday 6th June at 6pm Active Swindon Social Bike Ride -. Meet at the Coate Water café. For further information contact Gladys Barr on 01793 346299 or email glad.barr@ntlworld.com.

