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## 1 The Japan Times online

Friday, July 30, 2010

<http://search.japantimes.co.jp/cgi-bin/nn20100730b1.html>

Motojima to become new ITER head

Kyodo News

Osamu Motojima has been tapped as the new director general of the ITER Organization for an international project to build a nuclear fusion reactor in France, replacing Kaname Ikeda, according to science ministry officials.

The appointment was made at the ITER Council's extraordinary meeting held in Cadarache, southern France, on Wednesday, according to the Education, Culture, Sports, Science and Technology Ministry.

The European Union, Japan and several other countries are jointly building a thermonuclear reactor in Cadarache to study fusion as a future source of energy.

Motojima was director general of Japan's National Institute for Fusion Science from April 2003 to March 2009.

## 2. Iter parties agree new funding

29 July 2010 World Nuclear News

[http://www.world-nuclear-news.org/NN\\_Iter\\_parties\\_agree\\_new\\_funding\\_2907101.html](http://www.world-nuclear-news.org/NN_Iter_parties_agree_new_funding_2907101.html)

Countries taking part in the Iter project have agreed the project's schedule and costs, reportedly putting in extra money after the doubling of construction costs.

An extraordinary meeting of the Iter Council yesterday unanimously approved the project's baseline - its overall schedule and cost. The project is to build the world's biggest tokamak fusion reactor at Cadarache in southern France. It should be large enough and hot enough to reach 'ignition' and maintain a stable heat-generating plasma for minutes. After research and development at Iter it should be possible to build a demonstration fusion power plant around 2030.

First plasma is now slated for November 2019 - about a year after the previous schedule - and the start of deuterium-tritium operation is set for March 2027, although the Iter Organisation was encouraged to explore ways to bring this forward to 2026.

Details of the cost were not revealed in the official statement found on the Iter website but it is thought to have ballooned to require an extra €1.4 billion (\$1.8 billion) from European funds for the 2012-3 period. Europe is paying 45% of the construction costs, while the other participants (China, India, Japan, South Korea, Russia and the USA) are paying 9% each.

One Brussels study on Iter costings noted a 2001 estimate for construction was €5.9 billion, of which the EU's Euratom budgets were supposed to fund €2.7 billion (€1.7 billion in kind with components and systems and €945 million in cash). Earlier this month the commission admitted there were "substantial overall cost increases for Iter, which have more than doubled the costs for Europe."

Chairing the Iter Council meeting that approved the budget, Evgeny Velikhov said: "What we are achieving here is to ensure not only the success of Iter but also the success of fusion."

Reports on the new cost and spending commitments from the parties could not be confirmed. Iter staff were thought to be busy in meetings following the changeover to leadership by a new director general - Osamu Motojima. Previous head Kaname Ikeda led the organisation from late 2005 and had requested to resign "at the moment the Iter baseline would be approved."

*Researched and written by World Nuclear News*

### 3. Science Business

#### NEWS HIGHLIGHTS

22 July 2010 Policy | ITER | European Union

#### **FP7 money may be diverted to plug hole in ITER accounts**

Science|Business reporting

<http://www.sciencebusiness.net/index.php>

The ITER fusion reactor

#### **The EU may divert €460 million from the Seventh Framework Programme (FP7), which funds research grants from 2007 until 2013, to plug the hole in the budget of the International Thermonuclear Experimental Reactor (ITER) nuclear fusion project.**

This proposal, put forward by the European Commission this week, requires approval from the European Parliament and the Council. The reallocation of funds is necessary because Europe's costs for the nuclear fusion project have more than doubled from an initial estimate of €2.7 billion, the Commission said this week.

Most urgently, the EU needs to find around €1.4 billion to meet estimated cost increases in Europe's contribution to ITER in 2012 and 2013. The Commission proposes reallocating €100 million from FP7 in 2012 and €360 million in 2013. It also suggests an initial €400 million transfer of unused funds from other EU budgets, with a further such transfer to be detailed later.

"The EU needs to show the vision and the resolve beyond the immediate financing difficulties and meet its international commitment to this project," EU Commissioners Janusz Lewandowski, responsible for budgets, and Maire Geoghegan-Quinn, in charge of research, said in a joint statement.

In a meeting on July 12, member states asked the Commission to adopt a new, lower baseline estimate of €6.6 billion, compared with the €7.2 billion estimated by the agency managing the EU's role in the project, for the EU contribution to the construction of ITER during a period of 2007-2020.

The Commission said it will probably support this revision at an extraordinary ITER Council meeting to be held on 27-28 July in Cadarache, France, the site of the reactor.

ITER is an international project, involving the EU, the US, China, Japan, India, Russia and South Korea, that aims to demonstrate the potential of nuclear fusion as an energy source.

#### **4. Published online 7 July 2010 | *Nature* 466, 171 (2010) |**

**doi:10.1038/466171a**

<http://www.nature.com/news/2010/100707/full/466171a.html>

**EU research funds to be diverted to fusion reactor**

**Ailing ITER may get bailout from framework programme.**

**Geoff Brumfiel**

European nations hope to redirect more than €1 billion (US\$1.25 billion) earmarked for research grants to make up a budget shortfall at the experimental ITER fusion reactor, *Nature* has learned.

The proposal has alarmed scientists, who say that it will rob researchers of vital funds at a time when governments are planning to scale back domestic research budgets in response to the global economic downturn. "I think it's a small catastrophe in the present situation," says Helga Nowotny, president of the European Research Council, which funds research across Europe. "It's bad for European research."

Based in the south of France, the ITER reactor will one day fuse hydrogen isotopes to produce energy. When the project was agreed in 2006, it was expected to cost €5 billion to construct, but unofficial estimates now put ITER's price at about €15 billion (see *Nature* **465**, 532–533; 2010 ). As the largest contributor to the project, the European Union (EU) will have to pay €7.2 billion, far more than the €2.7 billion it had initially expected. The most pressing problem is a €1.4-billion gap in the construction budget for 2012–13.

**“Europe cannot afford not to go forward with the project.”**

A tentative agreement reached on 25 June by Europe's 27 member states would fill most of that shortfall using cash from the EU's Seventh Framework Programme (FP7) for research, the main science-funding mechanism in Europe for 2007–13. FP7 has an overall budget of €50.5 billion and still has about €20 billion unspent.

The European Commission, the EU's executive body, is expected to fight the proposal, arguing that drawing so heavily on FP7 funds would damage other research goals. But insiders say that it is likely that a compromise deal would still see tens or hundreds of millions of euros given to ITER.

FP7 programmes that have already been selected will not suffer, says Achilleas Mitsos, who was the director-general for research at the European Commission from 2000 to 2005 and was a negotiator on the ITER project. But FP7 would have difficulty absorbing the entire €1.4-billion cost, which might come at the expense of new projects, he says.

Mitsos predicts that the EU will continue to fully support ITER, because failure would incur heavy political and financial costs. "Europe cannot afford not to go forward with the project," he says. ITER's council hopes to agree a final plan at its next meeting, scheduled for late July. With that in place, the first ITER experiments could begin in late 2019.

See <http://go.nature.com/4KK24o> for a longer version.

## **5. Nuclear power plants 'by 2025'**

Andrew Burrell From: *The Australian* July 22, 2010 12:00AM

<http://www.theaustralian.com.au/news/nation/nuclear-power-plants-by-2025/story-e6frg6nf-1225895295248>

**A PIONEER of Australia's uranium industry, John Borshoff, predicts the nation will have its first nuclear power plant within 15 years.**

The Paladin Energy chief said this as governments are forced to consider new measures to reduce greenhouse emissions.

As the uranium sector yesterday called on political leaders to face up to the issue of nuclear power during the federal election campaign, Mr Borshoff said he believed a sensible debate "has

to get going".

At a uranium conference in Perth, Northern Territory Resources Minister Kon Vatskalis also revealed his support for nuclear power despite federal Labor's hostility to the idea.

He said once people had the "full facts and figures" on what was the cleaner fuel, it could lead to widespread support for nuclear power.

Mr Borshoff told The Australian he believed Australian governments would need to follow other nations in allowing nuclear reactors for electricity generation, especially once a carbon tax or an emissions trading scheme was introduced.

"I believe that by hook or by crook, by the mid 2020s we'll be in end design of a nuclear reactor and there'll be no other technologies that will take on and alleviate the problem," he said.

"I think that if the debate can be sensibly started in the next two years we can aspire to be like Canada, which has gained a huge depth and wealth from nuclear power.

"It's inevitable there will be some sort of tax or levy on coal and nuclear will just slot into that space perfectly."

Mr Borshoff's comments came after fellow business leaders this week called for nuclear power to be included as a long-term option in the energy white paper promised by Federal Resources and Energy Minister Martin Ferguson.

Argonaut Securities chief executive Eddie Rigg told the conference that global demand for nuclear power was set for a "renaissance" driven by surging energy use in China and India.

He said 57 nuclear reactors were being built around the world, another 140 had been ordered and a further 150 had been proposed.

One tonne of uranium had the equivalent emissions of 20,000 tonnes of black coal and 8.5 million cubic metres of natural gas.

Mr Borshoff said he believed Queensland's Labor government would follow Western Australia by dropping its moratorium on uranium mining, a move that would benefit Paladin, which has deposits in the state.

## 6. Desal plants fuel hikes

Natasha Bitu, Consumer editor From: *The Australian* July 22, 2010 12:00AM

<http://www.theaustralian.com.au/news/nation/desal-plants-fuel-hikes/story-e6frg6nf-1225895299244>

**HOUSEHOLDS are paying at least 10 times more for energy-guzzling desalinated water than for traditional dam water.**

This comes as Australia seeks to drought-proof its growing cities.

The Productivity Commission will investigate the financial and environmental impact of Australia's desalination plants, which will supply nearly a third of capital city water supplies within two years.

The PC inquiry's chairwoman, Wendy Craik, yesterday said the costs of desalination plants, including electricity, would be analysed. "We'll be looking at the costs and benefits of desalination and the impact on prices," she said.

State governments are spending \$9 billion to build desalination plants in Melbourne, Sydney, Perth, Adelaide and on the Gold Coast. But the energy-guzzling "water factories" are feeding steep increases in water prices, with household bills rising as much as 22 per cent last month.

Start of sidebar. [Skip to end of sidebar.](#)

Inquiries by *The Australian* reveal that electricity charges make up half the cost of running Sydney's new \$1.8bn desalination plant at Kurnell, which is powered by a wind farm. Water from the Kurnell plant is costing \$2.24 per thousand litres, including the capital cost, debt payments and operating costs.

Dam water, however, can cost as little as 15 cents per thousand litres, depending on the age of

the dam, the filtration methods and the length of pipeline.

In Adelaide, where a desalination plant is due to open by year's end, the operational costs alone will reach \$1.30 per thousand litres of water if the plant runs full-throttle.

Queensland's trouble-plagued Gold Coast desalination plant, which has been closed for repairs, will cost 73 cents per thousand litres, although the cost excludes the \$1.2b construction price tag.

Southeast Queensland Water Grid spokesman Barry Dennien said that drinking water sourced from dams ranged from 20 cents to more than \$1 per thousand litres, due to the varied costs at different treatment plants.

Water from Perth's existing desalination plant costs \$1.36 per thousand litres, but the price of water from a second desalination plant due to be commissioned late next year will soar to \$2.11 per thousand litres.

A Perth Water Corporation spokesman yesterday said the new plant was being built 145km southwest of Perth, requiring a 16km pipeline at sea, while the existing plant was just 35km south of Perth and close to existing water infrastructure. He said energy costs had risen, "and again the location plays a part here."

In Melbourne, desalinated water is predicted to cost \$1.37 per thousand litres, including the construction and operating costs of the \$3.5bn plant to open next year.

The Water Services Association of Australia, representing the nation's major water utilities, said the desalination process consumed between 3.5 and 4.3 kilowatt/hours (kWh) of electricity per thousand litres, compared to 0.2 kWh for conventional dam water.

## **7. The EU's response to global warming is a costly mistake**

Europe's 20/20/20 policy will cost billions of pounds, but yield only tiny results, writes Bjorn Lomborg .

By Bjorn Lomborg Published: 8:19AM BST 02 Jul 2010

<http://www.telegraph.co.uk/news/worldnews/europe/eu/7867422/The-EUs-response-to-global-warming-is-a-costly-mistake.html>

Alarmist bells ringing: a scene from 'The Day after Tomorrow'. Photo: EPA

European leaders have a lot to deal with. The financial crisis has prompted several national stimulus packages and a joint effort to keep Greece afloat, while the EU is in danger of being outstripped by other economies that are growing faster, producing more efficiently and at lower costs.

One bright spot is that politicians remain committed to responding to global warming. Unfortunately, their plans do not withstand scrutiny. New research shows that the EU's "20/20/20" policy, which aims to cut greenhouse gas emissions to 20 per cent below 1990 levels by 2020 (and ensure 20 per cent renewable energy), will cost hundreds of billions of euros but yield only tiny benefits. The UK alone will be hit to the tune of an annual 35 billion euros (£28 billion).

As a cost-benefit analysis by the climate-change economist Richard Tol shows, any single regional carbon-reduction scheme will have a very small effect on emissions and temperature rises across the globe. That's not an argument against ever implementing one: but it means that it's crucial that the numbers stack up.

The EU recently stated that it would cost £39 billion a year to meet its emissions target. That figure is implausibly optimistic. Averaging out the best-regarded economic models shows that, even if politicians got their policies exactly right, the cost would come to at least £90 billion a year.

And Europe has not got it exactly right. Instead, it has made things worse, by introducing additional red tape, complication and constraints – in particular, that 20 per cent renewable-energy target. This is expensive because popular "green" energy sources such as wind and solar power cost more than replacing coal with gas. As a result, the real cost of EU policy is likely to be

as much as £170 billion.

In his study for the Copenhagen Consensus Centre, Tol assessed the net economic benefits of this policy. Using the conventional estimate that one ton of carbon dioxide is likely to cause about \$7 (£4.50) of damage, he found that the total benefit of the EU policy was just £5.7 billion. In other words, every euro spent is likely to generate just three cents' worth of benefits. My research shows that by the end of this century, the EU's approach will reduce temperature rises by approximately 0.05C – almost too small to measure.

The tragedy is that the EU could do much better for the world, and for itself. For far less than £8 billion a year the EU could halve the incidence of malaria, provide micronutrients (particularly vitamin A and zinc) to 80 per cent of the world's undernourished children and prevent a million deaths from TB.

EU leaders should not abandon the fight against climate change. But instead of wasting vast sums on a pointless policy, they should invest in developing green-energy alternatives. The reason it costs so much to reduce carbon emissions is that the green alternatives aren't close to being ready to replace oil and other fossil fuels. Change this, by investing in R& D, and the global impasse over climate change disappears. If we had affordable green-energy sources, everyone – including China and India – would buy them, and long-term emissions would drop significantly.

What Europe must not do is continue to barrel down a path that makes no economic sense. Yet it seems committed to its reckless course. The European Commission wants to toughen the carbon-reduction target to 30 per cent below 1990 levels – which Tol calculates would cost roughly £370 billion a year, twice as much as the existing plans. The effect, over the next 90 years, would be to reduce temperatures by an additional one-hundredth of a degree.

Expensive, poorly conceived carbon-emission plans such as the EU's will cause major economic damage and political strife, while doing little to slow global warming. Europe must change course.

*Bjorn Lomborg is the author of 'Cool It: The Skeptical Environmentalist's Guide to Global Warming' (Marshall Cavendish).*

## 8. UK to lift nuclear ban on India

From: The Australian July 29, 2010 12:00AM

<http://www.theaustralian.com.au/news/world/uk-to-lift-nuclear-ban-on-india/story-e6frg6so-1225898192692>

**AUSTRALIA is expected to come under pressure to lift its ban on uranium sales to India after British Prime Minister David Cameron agreed to allow the export of nuclear technology and components to New Delhi against official recommendations.**

Britain's The Daily Telegraph reported that Mr Cameron was to make the announcement on the nuclear deal last night. The paper said British companies would be able to strike deals worth billions of dollars under the new regime, which will be based on a presumption that export licences will be granted for products intended for civilian use unless there are specific concerns about a deal.

Britain's former Labour government had blocked the export of nuclear technology on the grounds that India had refused to sign the Nuclear Non-Proliferation Treaty.

It has been longstanding Australian Labor Party policy not to sell uranium to India despite a 2008 agreement by the members of the 45-nation Nuclear Suppliers Group, of which Australia is a member, to allow its members to sell uranium and civilian nuclear technology to India.

Mr Cameron is hoping that his visit to India will win over a key business partner seen as vital to boosting Britain's post-recession recovery. He is heading the largest British delegation to travel to India in recent memory.

The trip kicked off yesterday in the southern city of Bangalore -- the showcase of India's IT industry -- where Mr Cameron visited the country's second-largest software exporter, Infosys, and the state-run defence giant Hindustan Aeronautics Ltd. Among a raft of trade agreements to be

signed, the expected highlight is a deal worth up to \$720 million for BAE Systems to supply 57 more Hawk trainer jets. India ordered 66 Hawk jets from BAE in 2004. All the aircraft in the follow-up deal will be jointly assembled locally with HAL.

Mr Cameron arrived in India after visiting Turkey, where he risked opening a rift with Israel after branding the Gaza Strip a "prison camp".

"Gaza cannot and must not be allowed to remain a prison camp," Mr Cameron said as he addressed Turkey's diplomatic rift with Israel after the raid on the Gaza flotilla, in which nine Turkish citizens were killed.

He said humanitarian goods and services "must flow in both directions" from the Palestinian territory, under partial blockade from Israel.

Hamas, the Islamist movement in control of Gaza, welcomed Mr Cameron's remarks.

Earlier, Mr Cameron lauded Turkey's "unique relationships and influence" in the Middle East, waving aside his host's opposition to new EU and US sanctions on Iran as a "difference of emphasis".

Turkey, together with Brazil, is pushing a swap under which Tehran would surrender some of its uranium stockpile in return for civil nuclear fuel. A key meeting to discuss the proposal will take place shortly in Istanbul.

But speaking on Tehran's doorstep, Mr Cameron said: "Let's be frank about this. Iran is enriching uranium to 20 per cent with no industrial logic for what they are doing other than producing a bomb."

He said that under the proposed deal Iran would keep about half the material that it needs to make a nuclear arsenal. "We need Turkey's help now in making it clear to Iran just how serious we are about engaging fully with the international community."

*AFP, The Times*

## 9. Faith is always inferior to facts

From: *The Australian* July 27, 2010 12:00AM

<http://www.theaustralian.com.au/news/opinion/faith-is-always-inferior-to-facts/story-e6frg71x-1225897191770>

**TRUE believers in human-induced global warming are often angry at the way sceptics snipe at the occasional error in the evidence. Like the claim Himalaya glaciers would melt by 2035, which turned out to be less wrong than concocted. And like the suggestion Pacific islands would soon sink beneath the sea unless something was done, which turned out to be wrong when somebody used a tape measure on Tuvalu. And the global warming lobby will not like the way Hedley Thomas in *The Australian* this morning reveals crook calculations in the software used to measure energy efficiency in new house constructions may mean people are wasting money. This looks like another example of what occurred with the government's loans for environmentally friendly domestic energy and home insulation schemes, which went ahead without definitive data on their benefits. As Adelaide academic Terry Williamson has warned for years, the science on estimating how to improve domestic energy efficiency is not settled.**

This does not mean serious scientists with questions about global warming, and the media, including this newspaper, which report their work, deny the world must cut emissions. As *The Australian* has often argued, we should give the planet the benefit of the doubt. But this does not mean everybody should always accept what environmentalists demand, for fear of being accused of being climate change deniers. We saw what happens when people do in the lead-up to the Copenhagen conference, when it was revealed climate change scientists at the University of East Anglia were so sure they were right they stopped sceptics accessing information.

Without sceptical experts, there is no one to ask whether green home loans and building codes are a value-for-money way to cut emissions, whether there are more efficient ways of spending

money to reduce our consumption of coal-fired electricity. We are seeing what happens when green proposals are adopted uncritically as Julia Gillard promises tax breaks for business to improve the environmental efficiency of buildings, while the jury is out on the efficacy of green building codes for homes. For climate change academics, the alternative-energy industry and single-solution politicians who think government subsidies for backyard windmills solve everything, it is easy being green. Too easy.

## 10. Met Office report: global warming evidence is 'unmistakable'

A new climate change report from the Met Office and its US equivalent has provided the "greatest evidence we have ever had" that the world is warming.

By Louise Gray, Environment Correspondent Published: 6:00PM BST 28 Jul 2010

<http://www.telegraph.co.uk/earth/environment/climatechange/7914611/Met-Office-report-global-warming-evidence-is-unmistakable.html>

It is the first time a report has brought together all the different ways of measuring changes in the climate

The **report** brings together the latest temperature readings from the top of the atmosphere to the bottom of the ocean

Usually scientists rely on the temperature over land, taken from weather stations around the world for the last 150 years, to show global warming.

But climate change sceptics questioned the evidence, especially in the wake of recent scandals like "**climategate**".

Now for the first time, a report has brought together all the different ways of measuring changes in the climate. The ten indicators of climate change include measurements of sea level rise taken from ships, the temperature of the upper atmosphere taken from weather balloons and field surveys of melting glaciers.

New technology also means it is possible to measure the temperature of the oceans, which absorb 90 per cent of the world's heat.

The **State of the Climate report** shows "unequivocally that the world is warming and has been for more than three decades".

And despite the cold winter in Europe and north east America, this year is set to be the hottest on record.

The **annual report was compiled by the Met Office and the National Oceanic and Atmospheric Administration (NOAA)**.

Both the NOAA and Nasa have stated that the first six months of this year were the hottest on record, while the Met Office believes it is the second hottest start to the year after 1998.

Dr Peter Stott, Head of Climate Monitoring and Attribution at the Met Office, said "variability" in different regions, such as the cold winter in Britain, does not mean the rest of the world is not warming.

And he said 'greenhouse gases are the glaringly obvious explanation' for 0.56C (1F) warming over the last 50 years.

"Despite the fact people say global warming has stopped, the new data, added onto existing data, gives us the greatest evidence we have ever had," he said.

Sceptics claimed that emails stolen from the University of East Anglia show scientists were willing to manipulate the land surface temperatures to show global warming.

The scientists were cleared by an independent inquiry but the 'climategate scandal' as it became known cast a shadow over the case for man made global warming.

Dr Stott said the sceptics can no longer question the land surface temperature as other records also show global warming.

He pointed out that each indicator takes independent evidence from at least 3 different institutions in order to ensure the information is correct. Despite variations from year to year, each decade has been warmer than the last since the 1980s.

"Despite the variability caused by short term changes, the analysis conducted for this report illustrates why we are so confident the world is warming," he said. "When we look at air temperature and other indicators of climate, we see highs and lows in the data from year to year because of natural variability. Understanding climate change requires looking at the longer-term record. When we follow decade-to-decade trends using different data sets and independent analyses from around the world, we see clear and unmistakable signs of a warming world."

## 11. Climate change round the world

The simultaneous catastrophes of flooding in Pakistan, wildfires in Russia and landslides in China are evidence that global warming predictions are correct, according to climate change experts.

Published: 9:00PM BST 10 Aug 2010 Daily Telegraph

<http://www.telegraph.co.uk/earth/environment/climatechange/7937102/Climate-change-round-the-world.html>

Here is a list of some of the major events since the start of the year:

**China** - At least 702 people die in northwestern Gansu province at the weekend when torrent of mud and rocks engulfs town of Zhouqu, with more than 1,000 missing. Year of heavy flooding has already killed nearly 1,500.

**Pakistan** - UN announced on Monday that the Pakistan flooding was **the greatest humanitarian crisis in recent history**, with more people affected than the South-East Asian tsunami and the recent earthquakes in Kashmir and Haiti combined. More than 1,600 killed, while almost 14 million have suffered losses requiring long or short-term help.

**Central Europe** - At least 11 killed and hundreds of homes damaged this week. Flooding in May and June caused hundreds of millions worth damage, killing 18 in Poland, others died in Czech Republic, while thousands were forced to flee homes in Slovakia and Hungary.

**Kashmir** - Hundreds of people still missing in Indian Himalayas after flash floods hit the remote region of Ladakh, killing at least 177.

**Russia** - Summer heatwave estimated to have cost almost 5,000 lives. Vladimir Putin ordered a halt to all exports of wheat and other grains due to the "abnormally high temperatures" and most of harvest being wiped out by fires. Heatwave could wipe up to \$14 billion off economic growth according to economists.

**Australia** - Coldest June in nearly 30 years in Sydney with temperatures dropping to 39F (4C).

## 12. Plants could adapt to global warming within two decades, say scientists

*Environment Editor* The Times Published: 11 August 2010 Environment

<http://www.thetimes.co.uk/tto/public/sitesearch.do?querystring=Flowers+adapt+to+Climate+change&x=42&y=5&sectionId=342&p=tto&pf=all>

Plants can **adapt to climate change** much better than...thought, according to a study which suggests...been overstated. **Flowers** can inherit the ability to cope with **changes** in temperature and...which plant species **adapt to** a changing environment...