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'Living green walls' lined with trees and bushes could help reduce toxic pollution by absorbing carbon dioxide on major commuter routes



ADVERT

- Birmingham Conservatives have outlined plans for the installation of green walls
- Structures lined with trees and bushes would deliver greener air to the city
- It is estimated that 900 deaths a year in Birmingham are linked to air pollution

By [HARRY PETTIT FOR MAILONLINE](#)

PUBLISHED: 12:32 BST, 13 February 2018 | **UPDATED:** 15:52 BST, 13 February 2018

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'Living green walls' that absorb pollution could soon be built along major commuter routes around [Birmingham](#).

Structures in the city lined with trees, bushes and other greenery would deliver cleaner air at the roadside according to new plans.

It is estimated that 900 deaths a year in Birmingham are linked to air pollution through conditions such as heart disease, lung disease and cancer.

Scroll down for video



Pollutants given off by vehicles are often trapped in so-called 'urban canyons', such as busy roads flanked by tall concrete walls. If the structures either side of the road were 'green walls' with plants growing on them then many of these pollutants would be converted into oxygen

The plans, put forward by Birmingham Conservatives ahead of the May 3 UK local elections, suggest lining the city's 'urban canyons' with green structures.



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Today



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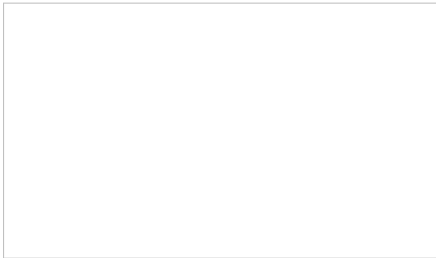
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Urban canyons are confined areas of a city that are flanked by high walls of concrete or glass, such as busy roads.

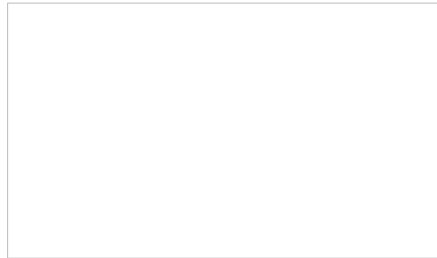
Because pollution cannot easily escape street canyons, lining them with green walls of grass, climbing ivy and other plants could filter out dangerous particles.

TRENDING



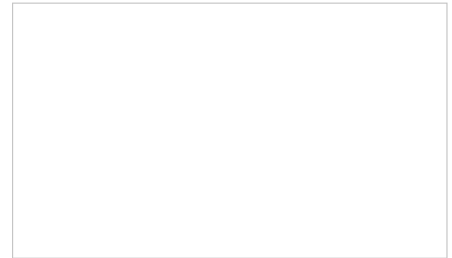
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View gallery

Structures lined with trees, bushes and other greenery, including 'green buildings' (artist's impression), would deliver cleaner air in Birmingham, according to new plans outlined by the city's Conservative party



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View gallery

'Green walls' that absorb pollution could soon be built along major commuter routes around Birmingham. Local politicians have outlined plans to line the Aston Expressway, a major commuter route out of the city with structures lined with plants (artist's impression)

One Birmingham Conservative councillor said the walls could remove 40 per cent of nitrogen oxides and 60 per cent of particulate matter from the surrounding air.

Exposure to these pollutants has previously been linked with a higher chance of cancer and heart attacks in adults, as well as lung problems in children.

Plans for green walls in Birmingham would dip into a £500 million (\$700 million) pot of national funds to improve the city's green infrastructure.

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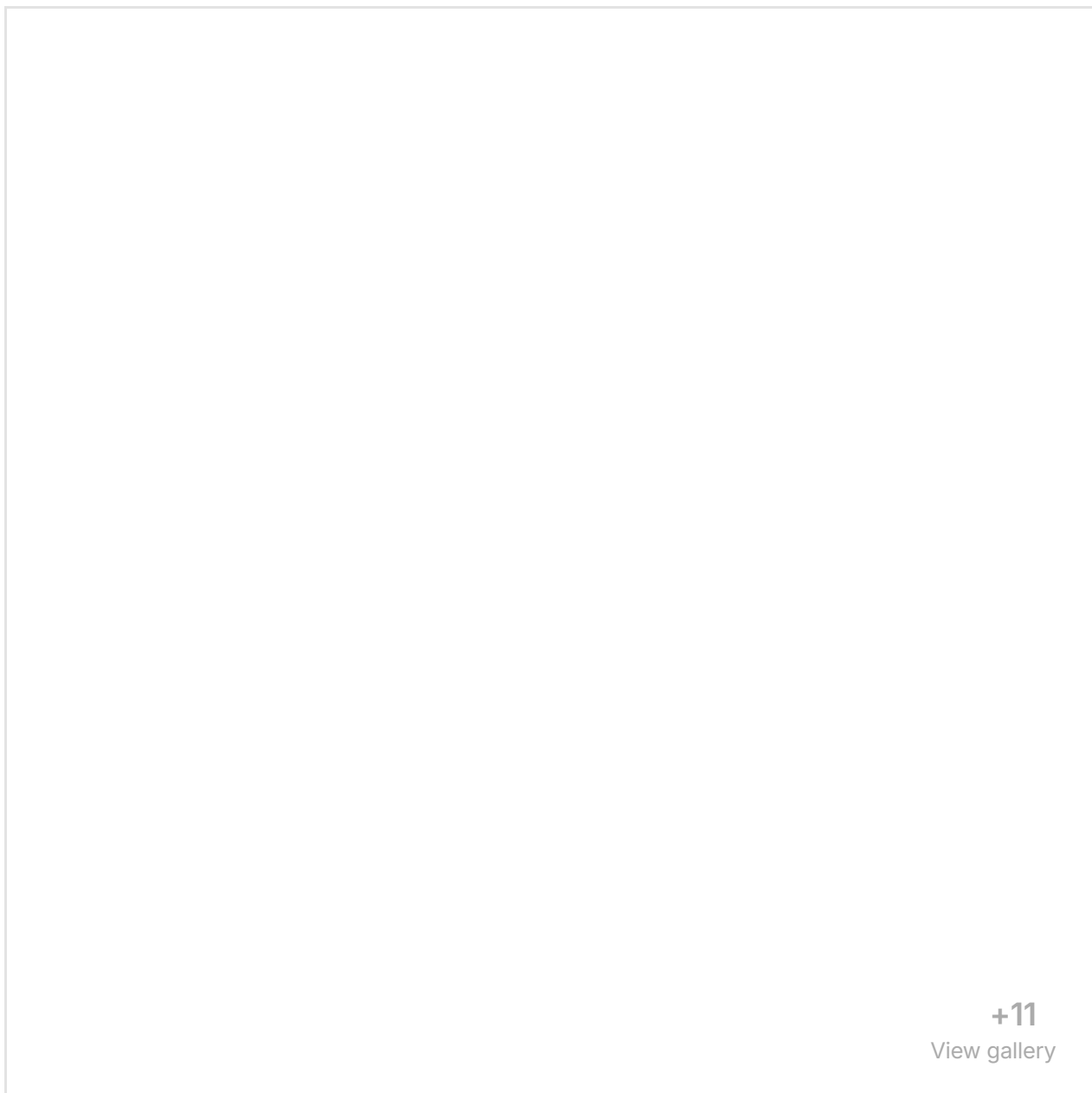
ADVERT

'Green walls' are urban structures lined with trees, bushes and other greenery.

They have been proposed as a way to tackle air pollution by absorbing major pollutants along busy commuter roads and city streets.

'Greening up' our streets with urban walls could reduce pollution in urban areas by as much as 30 per cent, according to a 2012 paper from the Universities of Birmingham and Lancaster.

Researchers found that green walls could remove 40 per cent of nitrogen oxides and 60 per cent of particulate matter from the surrounding air.



'Green walls' are urban structures lined with trees, bushes and other greenery. They have been proposed as a way to tackle air pollution by absorbing major pollutants. Pictured is a Green Wall installed at Edgware Road Underground Station in London

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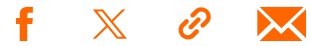
Exposure to these pollutants has been linked with a higher chance of lung cancer and heart attacks in adults, as well as breathing problems in children.

The walls absorb pollution because plants naturally take in carbon dioxide and other pollutants and then expel fresh, clean oxygen.

Green walls would be most effective alongside a city's 'urban canyons' - confined areas flanked by high walls of concrete or glass.

Because pollution cannot easily escape street canyons, lining them with walls of grass, climbing ivy and other plants could filter out dangerous particles that would otherwise remain trapped at ground level.

Sites in the UK with green walls include Centenary Square in Birmingham, as well as a number of locations in London including Edgware Road Underground Station, Westfield Shopping Centre and Park Lane.



Birmingham Conservatives intend to line the Aston Expressway, a major commuter route out of the city, and other 'canyon locations' in the city with living walls.

The city already has a green wall at Centenary Square in the city's centre, with London also sporting a number of the living structures at sites including Edgware Road Underground Station, Westfield Shopping Centre and Park Lane.

'Greening up' our streets with urban walls could reduce pollution in urban areas by as much as 30 per cent, according to a 2012 paper from the Universities of Birmingham and Lancaster.

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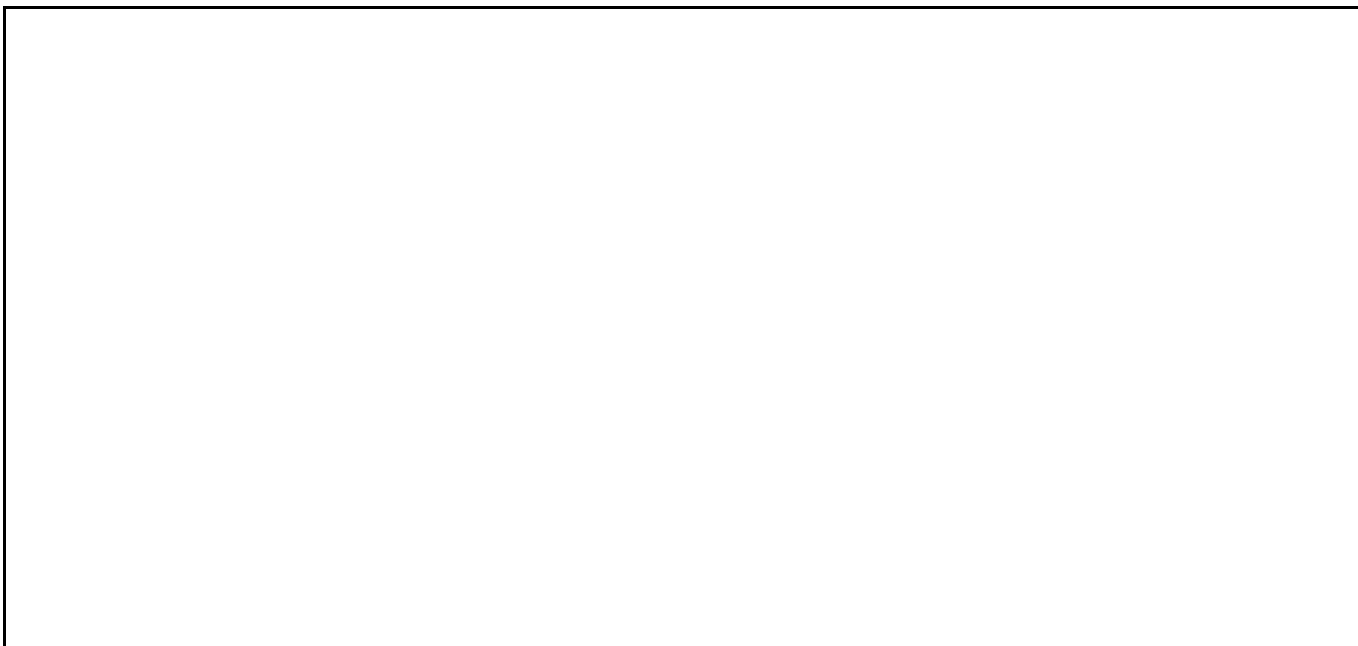
and Lancaster.

Councillor Robert Alden, Leader of the Conservative Group in Birmingham, said: 'Our vision means that we not only deliver clean air, but in doing that transform our City to being a global leading Green City.'

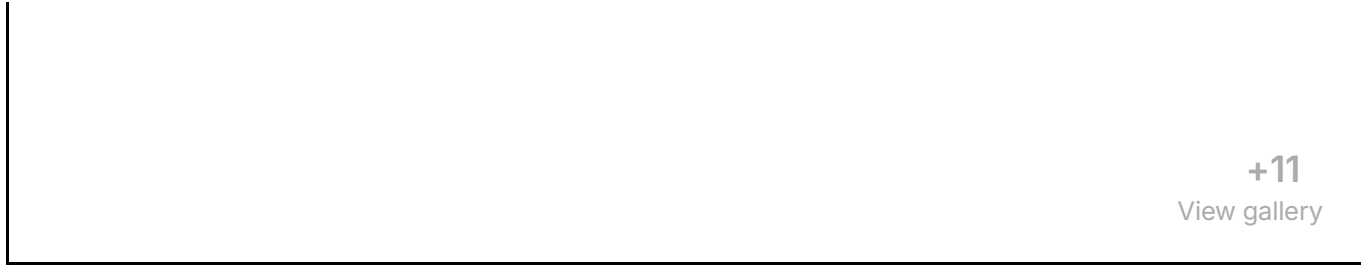


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'Greening up' our streets by installing 'living' structures (artist's impression) could reduce pollution in urban areas by as much as 30 per cent, researchers at the Universities of Birmingham and Lancaster found in 2012



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Birmingham Conservatives intend to line the Aston Expressway (pictured) and other 'canyon locations' in the city with living walls. Party officials put forward the project as part of their proposals ahead of the UK's May 3 local elections

'The plans Birmingham Conservatives are setting out will transform Birmingham with green infrastructure like living green walls being installed on city canyon locations like parts of the Aston Expressway to help clean the air around our roads.

'Research shows that they can remove up to 40 per cent of NOx and 60 per cent of particulate matter from the surrounding air.

'A Conservative Council would create a green infrastructure network across Birmingham, it would include living green walls, urban forests, micro parks and use of new technology like 'City Trees' which are 13-foot frames of moss covering that has the cleaning power of 275 trees.'

British Heart Foundation explains the impact of air pollution



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The plans have brought criticism from some members of the public, with locals taking to social media to voice their concerns. Joe Eveson commented: 'I just can't imagine [the Aston Expressway (pictured)] with green walls - it would be like a totally different world'

The plans have brought criticism from some members of the public, with locals taking to social media to voice their concerns.

Commenting on the proposed plans for the notoriously busy route, Clair Roberts said: 'No way! How did they get rid of the cars?'

Chris Milne wrote: 'Given it is THE WAY in or out of Birmingham for anything other than the South West, I wonder why they don't prioritise the M6 North & South thoroughfares instead of worrying about what the view is while you're stuck in traffic on it. I suspect the pollution will drop if the cars weren't sat there unnecessarily.'

Lynda Spence wrote: 'Why waste money? It's been like this for years. Give it to the NHS instead.'

Joe Eveson commented: 'I just can't imagine it with green walls - it would be like a totally different world.'



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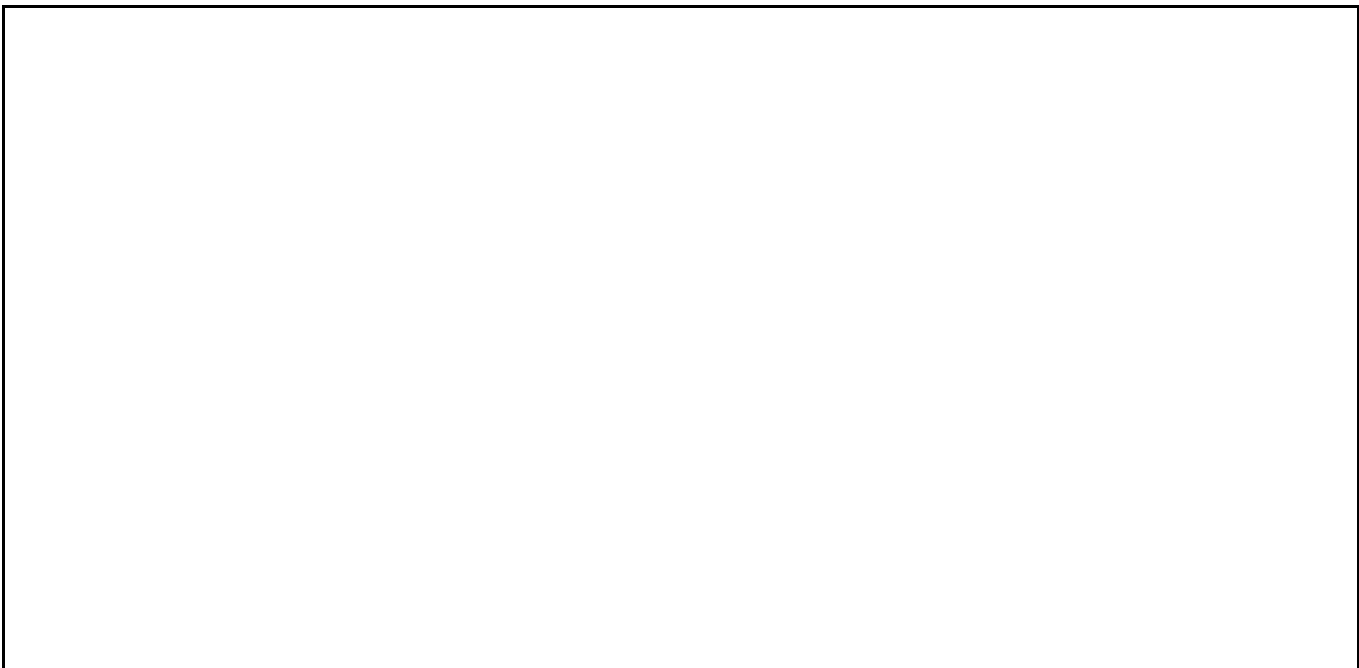
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Birmingham Conservatives have outlined plans to line the Aston Expressway, a major commuter route out of the city, with 'green walls'



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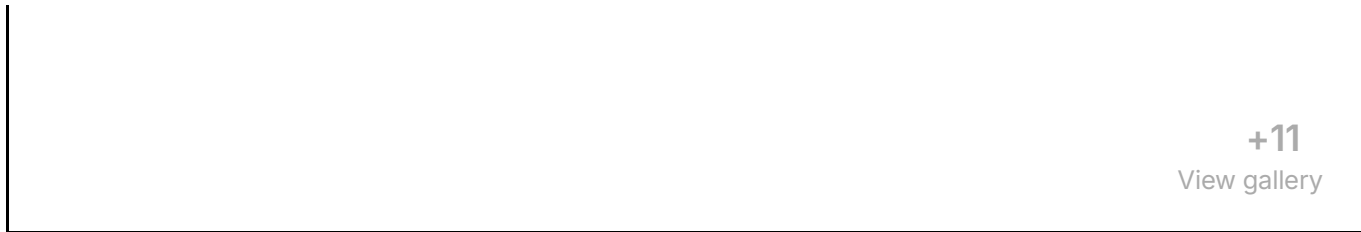
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The walls are not the first radical environmental change set for Britain's polluted roads. Large 'tunnels' covering stretches of motorway to protect locals from dangerous levels of pollution are being considered by Highways England (artist's impression)

The walls are not the first radical environmental change set for Britain's polluted roads.

Large 'tunnels' covering stretches of motorway to protect locals from dangerous levels of pollution are being considered by Highways England.

The agency said in its August 2017 air quality strategy that it is exploring the possibility of building physical canopies around main roads to soak up car fumes.

It is working on trials using a material that can absorb nitrogen dioxide (NO2), which can cause lung disease and is produced by diesel engines.

In its report, Highways England said it is 'investigating if we can reduce the costs to construct a canopy, which is a tunnel-like structure designed to prevent vehicle emissions reaching our neighbours'.

City Air app helps Londoners lower their exposure to pollution



Watch the full video

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Birmingham

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[Wooper](#), Doncaster, United Kingdom, 6 years ago

The problem is who is going to keep up with all the maintenance of the bushes It's all been abandoned on motorways due to budget cuts. Have you seen the state of motorway central reservations rubbish and weeds a foot high. Great idea for the 1970s when we had a clean and tidy country not the dump it is now.

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[cynic66](#) Rugby, United Kingdom, 6 years ago

What a load of tosh, All over the country they plant trees to line any new roads, then 10 years later they cut them down and grind them up, not log them for fuel, just grind the whole flipping tree up and leave big piles of chipping on the roadside! Oh and of course they use diesel to chip them. So a carbon neutral fuel resource is wasted by the insanity that is government.

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[Anonymous](#) Unknown, 6 years ago

Headline: More plants is a healthier alternative to more toxic fumes.

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▶ **Lily /
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▶ **King
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▶ **Sere
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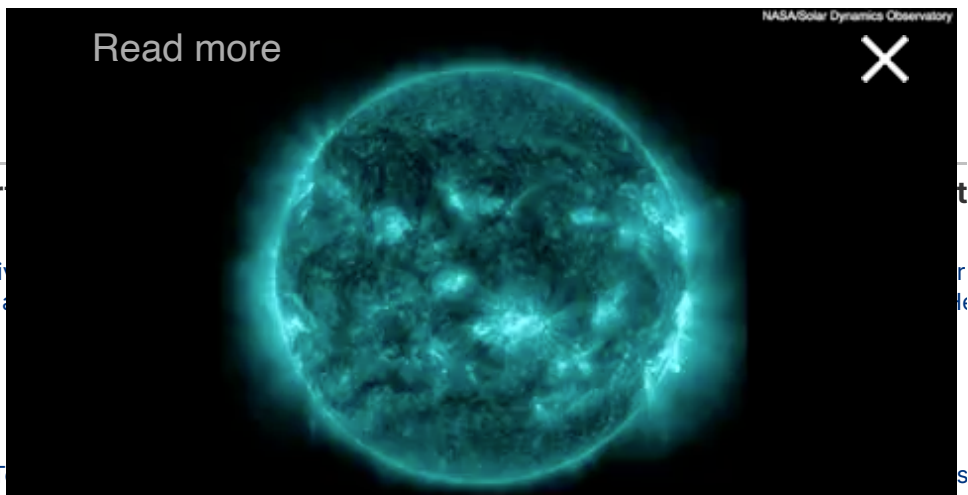
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