Traffic and Air Pollution

International Examples – and Cyprus

Andreas Markides & Spyros Komodromos

Saturday 25th January 2020 - Nicosia











Toxic air will kill 160,000 in next decade

THE MA TIMES

CLEAN AIR FOR ALL



Kaya Burgess

Dirty air will lead to more than 160,000 deaths from heart attacks and strokes over the next decade unless Britain signs up to stricter pollution limits, a charity has warned.

The British Heart Foundation (BHF) said that there could be more than 40 deaths from heart and circulatory conditions every day as a direct result of

particulate pollution across the UK. It is calling for Britain to sign up to stricter limits on the amount of fine particulate (PM2.5) pollution in the air.

The World Health Organisation (WHO) states that the amount of PM2.5 pollution must not exceed annual average levels of 10mcg per cubic metre. Britain is signed up to European Union limits, which are less stringent at 25mcg. The BHF is calling on the UK to adopt the WHO limits.

Fine particulate pollution is small enough to pass into the bloodstream and has been linked to heart disease, strokes and lung cancer. A study this month linked PM2.5 pollution to lower bone density and others have linked it to depression.

Jacob West, an executive director at the charity, said: "Every day millions of us inhale toxic particles that enter our blood and get stuck in our organs, raising our risk of heart attacks and stroke. Our toxic air is a public health emergency and we haven't done enough to tackle this threat. We need to ensure that stricter, health-based air quality guidelines are adopted into law. Clean air legislation in the 1950s and 60s, and more recently the smoking ban in public places, show that government action can improve the air we breathe."

A report from the Department for

Environment, Food and (Defra) last year assessed ain could meet the WF concluded that "while of would be technically fea

David Renard, the L ment Association's tran man, said: "Councils are role in tackling air pollu to work with the governi the impact of harmful en health of our communit

"For air quality plans to they need to be underpi cient funding."

A Defra spokeswom government was "stepping

ad left hip.

measures to reduce pollution. The fine metal dust produced by Dust from car brakes is estimated to

The shuly was published in the

Mothers call for action after toxic air forced them to move

THE MINITIMES

CLEAN AIR FOR ALL



Ben Webster Environment Editor

Three mothers who were forced to move bouse to escape air pollution are launching a campaign calling for new limits on toxic fine particles and clean air zones in all large cities.

Anna Page, Caroline Thomas and Victoria Lane remain very worried about the impact that air pollution is having on their young children and are calling on the government to act

Ms Lane was admitted to intensive care with respiratory failure when sign was four months pregnant and has adult-onset asthma. Ms Page's daughter has been in hospital repeatedly because of breathing difficulties and uses a stroid inhaler twice a day.

Mn Thomas suffers from asthma and starts to cough when she travels on busy roads. She thinks it is very likely that her one-year-old daughter will also develop asthma.

All the mothers say that illegal levels of air pollution have contributed to the health problems suffered by their families. They launched a petition yesterday which says that "a child's right to clean air shouldn't be a postcode lottery".

In a message to Boris Johnson, it says:
"Millions of our children are forced to breathe toxic air from the moment they are born. We need you to protect them right now by introducing clean air zones in all major cities, and to ensure air poliution meets World Health Organisation limits by 2030."

The Clean Air for All campaign, launched by The Times in May, has the same objectives.

Ms Thomas, 40, a housing association manager,

Victoria Lane had respiratory failure when she



She added: "Our only cycle routes to the train station are on very busy roads and the pollution is terrible. I have asthma and my chest tightens and I start to cough as soon as I get onto a busy road. I'm concerned about the effects of pollution on my daughter's lungs as they develop."

Ms Page, 36, a youth worker, is moving her family out of inner Manchester, where she lives on a residential street. She said she can "smell and taste" the pollution from vehicles using the road

"Our concern for our daughter's health has led to the decision to move out of the city to a more rural area," she said. "We are fortunate enough to have the means and flexibility in our employment to make the decision to move to a less polluted area. This is not the case for many families who live in cities.

"I feel strongly that we should all be able to live with our children in healthy and clean urban areas and that we all have the right to breath clean air."

Ms Lane, 38, a human rights campaigner, became involved in campaigning for clean air because of concern about pollution in the playground of her children's achool, William Patten Primary in Hackney, east London.

She said: "I had moved from Hong Kong to London due to concerns about nir pollution, only to find that London's air regularly breaches international guidance for safe levels of pollutants."

She added that her family was unable to move out of London because her job

and her husband's were based there and one of her daughters is being treated at Great Ormond Street Hospital.

She said she was campaigning "to ensure that the air our children are breathing as they go about their daily lives isn't going to



road increases the risk of stunted lungs.

and low lung function in children.

Air pollution has also been linked to premature birth, low birth weight and



Anna Page and Caroline Thomas say pollution has affected their families' health



Asthma victim's mother accuses PM over illegal pollution levels

Ben Webster Environment Editor

The mother of a nine-year-old girl who died of an asthma attack has accused Boris Johnson of failing to protect her from illegal levels of air pollution when he was mayor of London.

The allegation is made in documents submitted to a coroner preparing a new inquest into the death of Ella Kissi-Debrah, who lived near one of London's most polluted roads and was admitted to hospital 28 times for asthma attacks in the three years before her death in 2013.

Stephen Holgate, an expert on air pollution, found last year that Ella's hospital admissions coincided with high levels of nitrogen dioxide and particulate pollution near her home in Hither Green, southeast London.

The original inquest was quashed by the High Court in May and the new one will consider whether air pollution meaning she could become the first person to have air pollution mentioned as a contributory factor on her death certificate.

Philip Barlow, an assistant coroner for inner south London, made a provisional ruling yesterday that the inquest would be an "Article 2" inquest, referring to the state's obligation under the Human Rights Act to protect life. This means that it will be broad in scope and scrutinise whether failures by public bodies contributed to Ella's death.

The inquest is expected to hear evidence that illegal levels of air pollution continue to threaten many lives. The two-week hearing, due to be held next November or December, will increase pressure on the government to act on the problem.

A submission by Rosamund Kissi-Debrah, Ella's mother, says "there are systemic flaws related to Ella's death which give rise to a serious risk of many



Ella Kissi-Debrah was taken to hospital 28 times

argued that Boris Johnson, who was then the mayor of London, "unreasonably delayed or failed to implement an adequate low-emission zone prior to Ellas death".

The submission also criticises the government's clean air strategy, published in January, saying it fails to address air pollution from road transport.

"This omission is crucial in respect of Ella's death because around 80 per cent of unlawful nitrogen dioxide emissions

come from road transport," it says.

Mr Barlow told a pre-inquest hearing at Southwark coroners' court: "In this case there is at least an arguable breach

tion levels at the time of Ella's death and beforehand consistently exceeded the statutory levels." He said Professor Holgate had concluded that, if sufficient actions had been taken, there was "a real prospect that Ella's death could have been avoided".

Speaking after the hearing, Ms Kissi-Debrah said that the case was "extremely stressful for my family" but she was glad the timing and scope of the inquest had been agreed.

She added: "We know a lot more now about air pollution and the impact on health. It is not going to bring my daughter back but we just hope it will

save future lives."

Jocelyn Cockburn, representing Ms
Kissi-Debrah, said: "Air pollution is a
human rights issue and the coroner's
ruling recognises that the British public
have a 'right to life' in terms of air pollution and that there are arguable
grounds for suggesting that this was

Council officer spared jail for fake pollution figures

Italy will spend €2.2bn on 'green' buses to beat smog

World

Singapore slams door on more cars Singapore is to freeze the number of cars permitted on its roads in a continuing, and successful, effort to prevent the traffic jams and urban paralysis that have afflicted other Asian cities.

Next year there will be no increase the number of ownership permits, meaning that new cars will be allowed on the roads only after other users give

The new rule will add to the already The new rule will add to the already high cost of motoring. A "certificate of vehicle, costs about £28,000. Includ:

countries Such as Jakarta in Indonesia and Manila in the Philippines suffer traffic congestion that frequently redupollution that jeopardises public

Singapore, a city state, has the third highest national population density in the world. About 5.6 million people live in an area just bigger than Greater on has grown by

in has grown by

of vehicles has a quarter of a

per cent a year, but even this marginal rise has been capped for cars and motorcycles. Permits for lorries and buses will still be allowed to rise by a quarter of a per cent once the new rule comes into effect in February. It will be reviewed in 2020.

The government's goal is to increase the use of public transport. It argues that further private vehicle ownership requires road building that will constrain the space needed to improve strain the space needed to improve other infrastructure. It promises to railways and bus routes over the next of city also intends to con-

five years. The city also intends to continue restricting some roads to contrians only on Sundays.

China charges ahead of the West in drive for electric motoring

Midi Tang Beijing

hina is rapidly installing more charging points for electric cars as it attempts o overtake the West.

ging, general manager of Star Charge, a private operator of charging facilities that has built about 24,500 charging poles. In a market survey last year, the London-based research and consulting firm Kantar found that the lack of



Herald Square - before

And after!

Britain 'must do better' on emissions

A former Conservative environment secretary has told Boris Johnson that Britain should "get our own house in order" on reducing greenhouse gas emissions before the UK hosts an international convention on the issue next year, Ben Webster writes.

Lord Deben, also known as John Gummer, who served in Margaret Thatcher's government and who chairs the Committee on Climate Change

warned the prime mini yesterday that "UK effor climate crisis have so far

Mr Johnson promise speech on Friday "to ma the cleanest, greenest or UK is on course to excee limits that parliament next decade

Lord Deben wrote: ment's actions in the co define the UK response crisis. As bost of pext ve summit in Glasgow in I steps we take in the next also have a lasting globs

"You have the opport better international effo must get our own house

The committee said th ment should act swiftly Tory manifesto comm included trebling the rat ing and quadrupling power by 2030.

Lord Deben added th worryingly unprepared frequent or intense flood beatwayes expected beca change. He urged Mr Jo people in 200,000 home to install their own burn

York wants private cars banned in three years

local transport

sary

Mass transit aims of Trent city

Nottingham plans further extensions to its tram network and has been advising other urban areas on how to introduce a workplace parking levy.

opport for the busis strong in Nothingham, where 146 pagenger urneys were taken per heud of the population last year using four wheeled public transit. The city is



How other cities plan to cut emissions

Bath Later this year a city centre low-emission zone will see owners of polluting buses, coaches and HCVs. charged £100 a day and taxi and van drivers £9. Private cars exempt.

Bristol All diesel cars will be barried from the centre on weekdays from 2021.

Leeds Plan to charge the most polluting taxis. and minibuses £12.50 a day in the city centre. rising to £30 for buses. coaches and HGVs

City of London All petrol and diesel cars. to be banned from one road - Beech Street from this spring as part

to be made for taxis. Greater Manchester A clean air zone is

planned from 2021.

charging taxl drivers

£750 and bus, coach

Oxford A ban on

all but electric

hydroger

vehicles

by 2005.

and HGV owners £300

Andy D'Agorne, deputy leader of City of York council, said. "Reducing congestion and supporting more residents and visitors to move around our wonderful city through walking, cycling and public transport is essential to meet our ambition."

hybrid cars. An exemption is expected

Councillors approved the ban on December 19. They agreed to build a city-wide conensus around reducing and removing unnecessary car journeys". The council will seek to implement the measures by 2023.

News

Plan for underground line to run under Cambridge centre

Graeme Paton Transport Correspondent

Britain's first new underground railway in decades could be built as part of a radical plan to run trains into the heart of Cambridge.

Transport chiefs want to create a tram link that will travel through four miles of tunnels beneath the city.

It is hoped that the line, which has the backing of senior figures in central government, can be built in six years and could be open by the middle of the next decade.

It would make Cambridge only the fifth city in Britain to have a rail network that runs at least partly underground, after London, Glasgow, Liverpool and Newcastle. It would be the first since the completion of the Tyne & Wear metro which was opened in the

James Palmer, the Conservative mayor of Cambridgeshire and Peterborough, said the line would cost up to £2.8 billion and would be funded through a levy on housebuilding, with investment from local businesses as

well as passenger fares.

Girton Cambridge campus -City centre -

Addenbrooke's-A10 0

and the biomedical campu other lines then built to o the city. About 3.7 miles of t be dug through the city ce five underground stations ing as an interchange with

Cambridge Connect, th ent transport group project, said that Cambridge had been "characterised tunnelling" by experts.

Supporters say an under would help to protect the centre by taking traffic of ground section would only be a

Rail experts told The Times tha project was hugely ambitious. Sim

Graeme Paton

Oxford Street to ban traffic in fight against air pollution

Graeme Paton Transport Correspondent

All vehicles will be banned from Oxford Street under radical plans to tackle air

The western section of the central London street, home to some of the largest department stores in the country, will be pedestrianised by the end of All east-west truffic will be banned from the half-ende stretch from Selfridges to Oxford Circus. Truffic is likely to be removed from the remainder by the end of 2001.



of

charging zone with differential fees based on emission levels would be

Drivers of petrol and diesel cars face

£10 charge to tackle Oxford pollution

imposed from 2021 or 2022. The plans are the latest in a series of measures to improve air quality after several High Court brought against the govover ernment inaction on air pollution. The cases resulted in the government telling 33 councils to draw plans to cut

of

ning to become the first UK city to ban all private cars from its centre within three years.

Hayes, Tom member for the environment at Oxford city council, said: "We must clean up the lethal air we're all breathing. Oxford's zero-emission zone will help make 2020 the year we make a game-changing difference." The plans, which

will undergo a con-





So, if you're a micro-business or run a charity with a polluting van or minibus, you could receive £3500 for scrapping, which you could use to trade up to a Euro 6 vehicle.

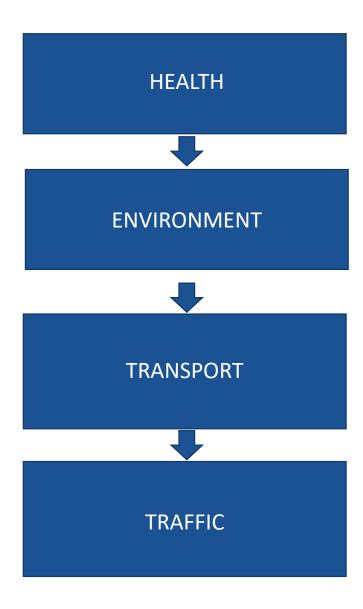
Or you could receive **£6000** that includes **32500** towards the running costs of an electric car

We'll pay you for taking your polluting van off the road









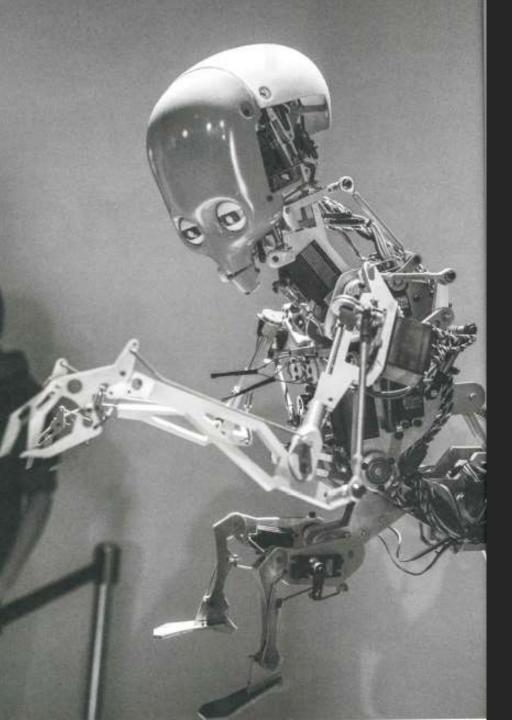




Eindhoven's Triple Helix

Partnership between:

- Local Government
 - University
 - Developers



Technology, Innovation, Design 'The conventional wisdom used to be that creating a strong economy came first, and that increased population and a higher quality of life would follow. The converse now seems more likely:

creating a higher quality of life is the first step to attracting new residents and jobs.

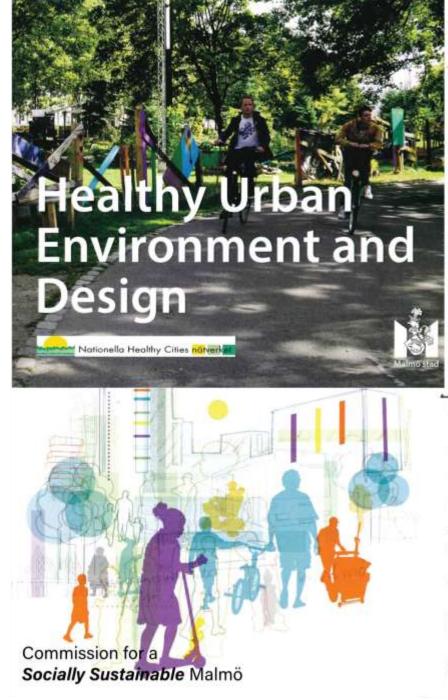












What drives us? The journey towards a sustainable Malmö is picking up speed, but we have only recently experienced a transition from an industrial city to a knowledge city. We know that change is possible. We know that change is necessary.

Malmö is an attractive city with high levels of participation, both within the municipality and by private stakeholders. Many actors are eager for this development to continue. This makes Malmö a strong motor to drive work on sustainable urban development. We are seizing on the competence and interest that has built up to accelerate this work.

Building sustainable cities is part of global survival. Malmö is at the cutting edge of sustainable urban development, and can therefore contribute to the successful adaptation model that needs to be highlighted and spread. This is another reason to intensify and increase our commitment.

How do we do this? In 2020 it won't be good enough to be an exemplary model to show visitors. Instead, the successful pilot programmes will be the standard, as the whole of Malmö develops into a sustainable city. Meanwhile, we have to continue investing both financial and human resources into testing new solutions and technology so that Malmö continues to be a forerunner and an inspiration for others.

In order to be able to progress quickly, it is important that everyone is pushing in the same direction. The Environmental Programme provides a common objective for everyone working for Malmö's future, both within the City of Malmö and within the municipality as a whole.

In working towards sustainable urban development, Malmö has cooperated widely with other cities. primarily in Europe. This work can be developed further, and made more efficient by developing partnerships and dialogue, not only with other cities but also with Malmö's own citizens, industry, college, university and other important actors. Malmö can also contribute by spreading knowledge and experience to these actors. Proximity to research is also important to benefit new business active in the environmental and sustainability sectors.

What is changing? In 2020 Malmö will be a denser, greener and more diverse city. Flexibility, mixed-use and space-efficiency are key words as Malmö's density increases. Malmö will be a city bursting with life and energy where comfort, pleasure, safety and quality characterise the environments in which its citizens live. Malmö's residents will be close to nature and rich biological diversity.

Those who want to make long journeys will find public transport to be the most convenient means. The City tunnel and other rail transport will ensure that the city and the region as a whole are well connected. In the city, walking and cycling will be easy, safe and effective.

The transition to 100% renewable energy will soon be implemented across the entire city. Energy efficiency has been improving on all fronts in the public and the private sector.

The supply of sustainable goods and services will be broad and readily available. Consumption of material goods will have decreased. Malmo's citizens will maintain a high quality of life despite minimum use of resources.

Malmö will have developed a strong trademark as "the sustainable city", attract and industry. The city will be an attractive place for everyone who wants to con **Malmo**, **Sweden** developing sustainability.







STREET MOBILITY PROJECT Introduction



WELL-DESIGNED STREETS IN BRISTOL PARK ENCOURAGE PEOPLE OF ALL AGES TO WALK

> IMAGE © LIVING STREETS

March 2017

STREET MOBILITY PROJECT TOOLKIT: MEASURING THE EFFECTS OF BUSY ROADS ON LOCAL PEOPLE

This document is an introduction to the toolkit that contains a number of tools we have developed so that local government and local communities can assess community severance in their area.













How Norwegians drove death from their roads

Norway Oliver Moody

The last time Norway had a year in which no children died on its roads, steam-powered vehicles plied the streets and Roald Amundsen had yet to reach the South Pole. It was 1910.

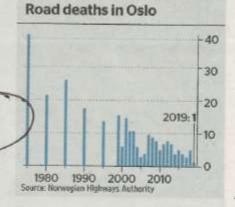
For the first time in more than a century, the country is celebrating 12 months without an under-16 losing their life in a traffic accident.

In Oslo, the capital, not a single child, pedestrian or cyclist was killed by a car. Throughout 2019 there was only one road death in the city, when a driver crashed his car into the barrier at a railway station near the city centre.

The safer streets are a consequence of Oslo's Vision Zero programme, under which it bought self-driving electric buses, tightened speed limits, laid countless sleeping policemen and banned private cars from some quarters.

The governing mayor, Raymond Johansen, told The Times it was conceivable that deaths from road accidents could be all but eliminated from well-managed cities. "When one person is killed in traffic, it is one too many," he said. "This puts us closer to our vision of zero traffic deaths."

The Vision Zero concept, which arose in Sweden during the mid-1990s, is based on two ideas: it is possible and morally imperative to eradicate deaths



on the roads, and while accidents are caused by individuals they are often the result of faulty systems. The approach has spread to British cities such as Blackpool, Edinburgh and Bristol.

However, nowhere has it been applied quite so effectively as in Norway. Three years ago in Oslo, which has a population of about 675,000, Mr Johansen's centre-left administration erased all 650 car parking spaces from streets in the centre. In 2018 it barred private vehicles from some streets and around primary schools and added 40 miles of bicycle lanes. It is experimenting with driverless buses.

Not everyone was pleased with the reforms. One business group predicted that the city centre would become a "ghost town". A politician from the Norwegian Conservative Party, which controlled the city for 18 years before Mr Johansen took power in 2015, complained of a "Berlin Wall against motorists".

Mr Johansen, 58, is proud of what has been achieved. "We have begun transforming Oslo into a more humanfriendly city," he said. "Car traffic will always be a part of the city, but drivers should act as guests... It's about humans taking back the streets from cars."

Norway has the safest roads of any sizeable country in the world, according to a report last month by the International Transport Forum. The death rate has nearly halved over the past decade from 208 in 2010 to 110 last year.

The principles of road safety are drilled into children from kindergarten. The traffic police are some of the best funded in Europe.

Would-be drivers have to take four days of "elementary traffic class", including training in first aid, before they can take their first driving lesson.

"There has been a focus on individual traffic behaviour for a long time in Norway," Christoffer Solstad Steen, of the road safety charity Trygg Traffikk, said. "There is an understanding that we are all responsible for our actions and if you don't follow common sense, for example by driving intoxicated, way too fast, without a seatbelt, [or] using a phone... the consequences are huge."

The safer streets are a consequence of Oslo's Vision Zero programme, under which it bought self-driving electric buses, tightened speed limits, laid countless sleeping policemen and banned private cars from some quarters.

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ΟΠΟΥ ΚΑΙ ΝΑ ΤΑΞΙΔΕΨΩ Η ΕΛΛΑΔΑ ΜΕ ΠΛΗΓΩΝΕΙ

George Seferis



Myth 1: The Weather

"It's too hot to cycle in Nicosia!"



Myth 2: Buses

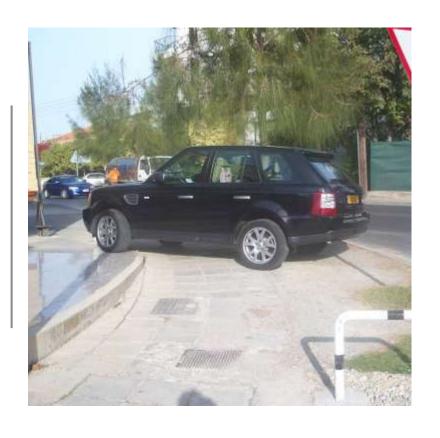
"Buses are for students, workers and immigrants!"

"A developed country is not a place where the poor have cars. It's where the rich use public transport"

Gustavo Petro, Mayor of Bogota, Colombia







Myth 3: Άναρχη Στάθμευση

Myth 4

ΠΟΛΕΟΔΟΜΙΑ VS ΥΠΟΥΡΓΕΙΟ ΜΕΤΑΦΟΡΩΝ, ΕΠΙΚΟΙΝΩΝΙΩΝ ΚΑΙ ΕΡΓΩΝ

1980s
Hypermarkets:
Major
Catastrophe!

Nicosia Mall





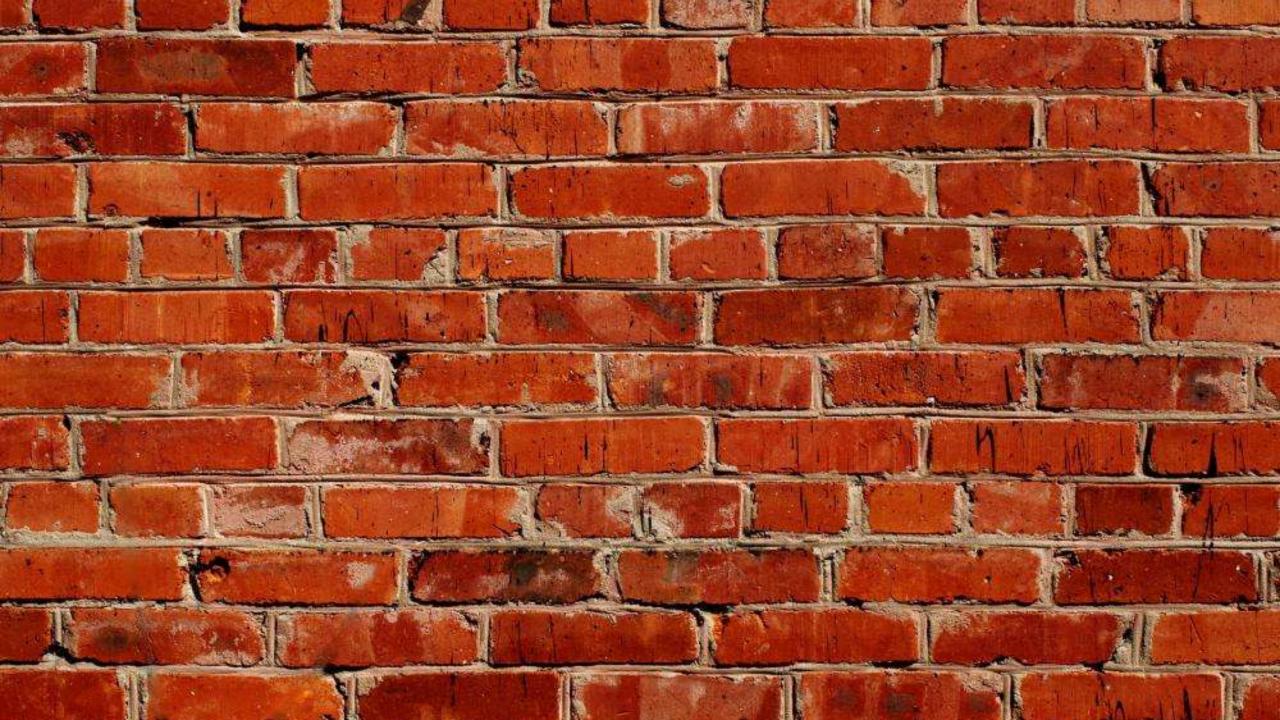




The most frightening myth of all!

So why is this happening?

It's a state of mind.



Walls!

'Walls' by C.P. Cavafy

Trixy

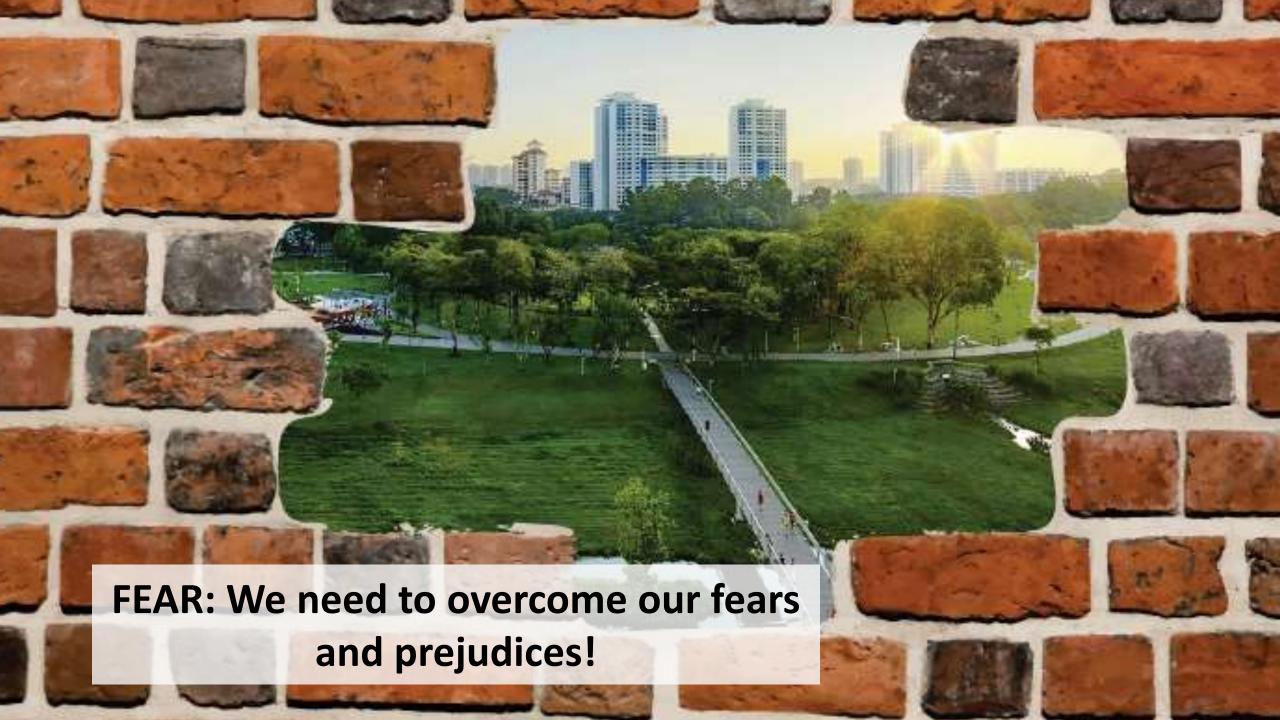
Χωρίς περίσκεψιν, χωρίς λύπην, χωρίς αἰδώ μεγάχα κ' ύψηλα τριμόρω μου έκλισεν τείχη.

Και κάθομαι και απεχπήσμαι τώρα εδώ. Άλλο δεν σκεπθομαι: τον νουν μου τρώμει κύθι ή τύχη.

A öler Eklyper tå trixy næs va pinr mosizes.

Αλλά δεν άκουσα ποθέ κρόθον κθιστων ή ήχον. Ανεπαισθήθων μ'έκχεισαν από τον κόσμον έζω.

K.T. Kabapys



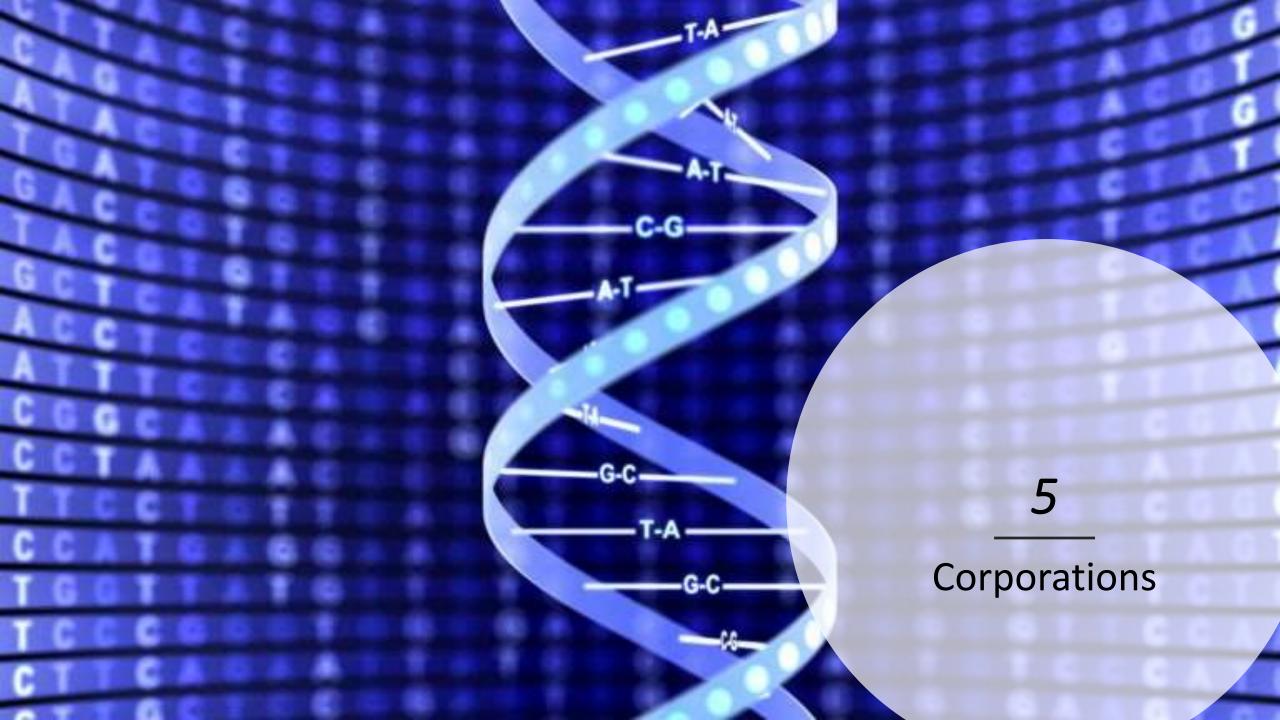
10 Recommendations











10 Recommendations

- 1. Stop building Roads
- 2. Fight Parking
- 3. Leadership
- 4. Green Cultural Corridor
- 5. Corporations
- 6. Pilot Studies
- 7. Tree Planting
- 8. Metropolitan Authority
- 9. Marketing and Education
- 10. ΠΟΛΕΟΔΟΜΙΑ (Land Use Planning)

"THEY"

How will we achieve this?



Personal



Corporate



Institutions (education, health)



Government

Η Σονάτα του Σεληνόφωτος

Come with me, And take the challenge!

ΑΣΕ ΜΕ Ν΄ ΑΡΘΩ ΜΑΖΙ ΣΟΥ

Yiannis Ritsos