

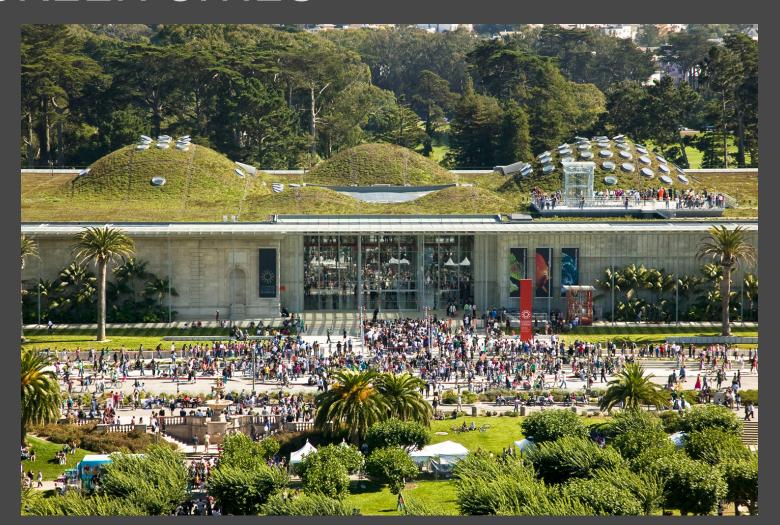


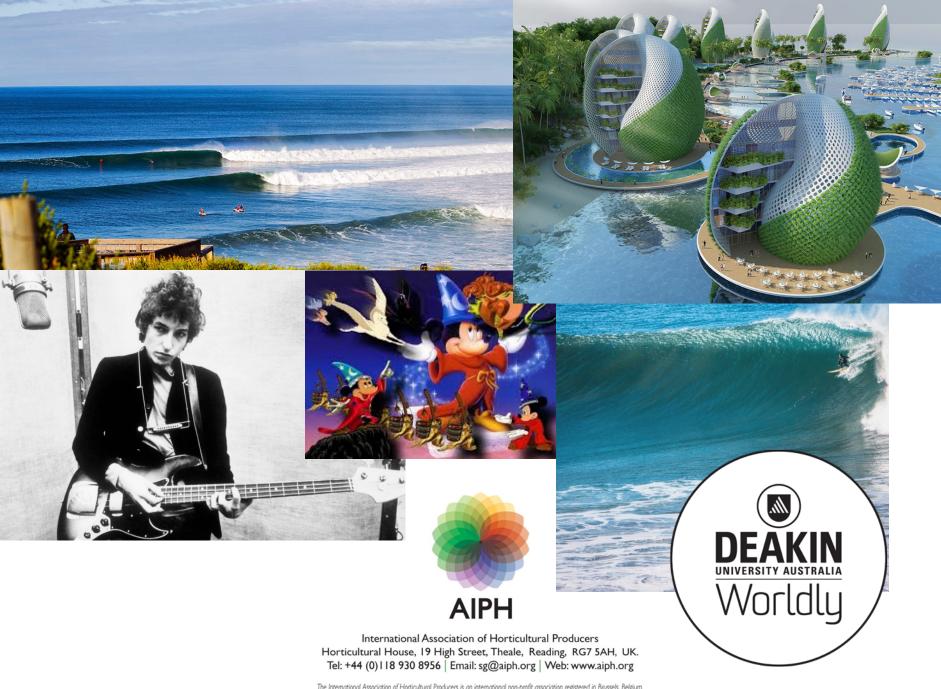




ELEVATED LANDSCAPES VERTICAL GARDENS GREEN CITIES

Matthew Dillon







THE BEAUTY & GENIUS OF NATURE







GREEN ROOFS AUSTRALASIA

Promoting green roofs and living walls for the built environment in Australia & New Zealand

- Charity / Not For Profit founded in 2007
- Online services to disseminate information for Design & Construction Industry; government; institutions; general public
- Content being case studies; research; policy & technical innovation
- Strong social media presence with regular newsletters
- Offer free access; membership access and sponsorship benefits
- Hold national conferences with expert speakers & trade show
- Join us www.greenroofsaustralasia.com.au





WORLD GREEN INFRASTRUCTURE NETWORK

Global peak body for the promotion of green infrastructure in urban planning

- Not For Profit global peak body
- Membership of 25 nations
- Online services providing membership and sponsorship
- International case studies; research; networking; policy directions
- Hold an annual World Congress in developing nations since 2008
- Join us <u>www.worldgreenroofs.org</u>
- Vegetation makes it possible





WGIC 2018 BANGALORE

World Green Infrastructure Congress 2018

- To be held in Bangalore, INDIA, 05 07 June 2018
- Theme: Rethink Sustainability
- Intention: To promote green infrastructure planning practices in India
- International expert speakers; trade expo; tours and training courses
- Join us www.WGIC2018Bangalore.org



ELEVATED LANDSCAPES VERTICAL GARDENS

green roofs / eco roofs / living roofs / vegitecture living walls / green walls / green facades



- Replace the landscape footprint
- The roof plan = floor plan
- Imported alien landscape
- Creating new ecosystem
- Building Integrated Vegetation
 - Eco Chic Green Bling
- Paradigm Shift to Green

Qn: HOW WILL GREEN ROOFS & LIVING WALLS CONTRIBUTE TO GREEN CITY PLANNING?





AIPH

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CURRENT GREY INFRASTRUCTURE PARADIGM





The 2030 Perfect Storm Scenario

UK Chief Scientific Advisor; John Beddington.

- ➤Global populations increase from 6.8 to 8.3 billion increasing urban density.
- ➤ Demand for food grows by 40% with 200 million at starvation level.
- ➤ Energy demands grow by 45% with prices at record highs.
- ➤ Demand for water grows by 30% with 4 billion living at water stress
- >GHG emissions are short of targets set, triggering worst effects of climate change.
- World leaders remain deeply divided over proposed solutions.



OPTIMISM IS A BELIEF THAT THERE IS A SOLUTION



UNDER UTILISED URBAN SPACE

ENVIRONMENTAL IMPACTS



- Urban Heat Island Effects
- Urban Flooding
- Impact water quality
- Impact air quality
- Collect particulates
- Impact water table recharge
- Cover the landscape footprint
- Disconnect to Nature



GREEN ROOFS Building Integrated Vegetative Systems **LIVING WALLS**

ENVIRONMENTAL

SOCIAL

ECONOMICAL

Stormwater retention

Thermal Insulation

Carbon Sequestration

Mitigate UHI effects

Sound Attenuation

Mitigate Air Pollution

Health & Wellbeing – Biophilic Design

Urban Agriculture

New Habitat Fauna Flora

Amenity Greenspace

Value Capture

Realty Value

Tenant Loyalty

Renewable Energy Bio Solar

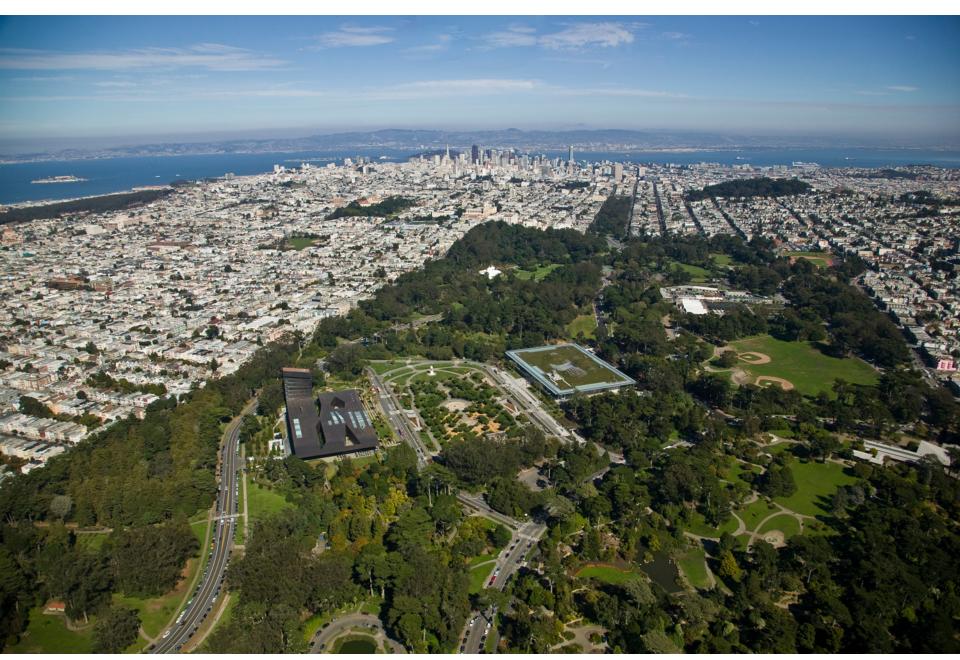
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Eco Chic Green Bling



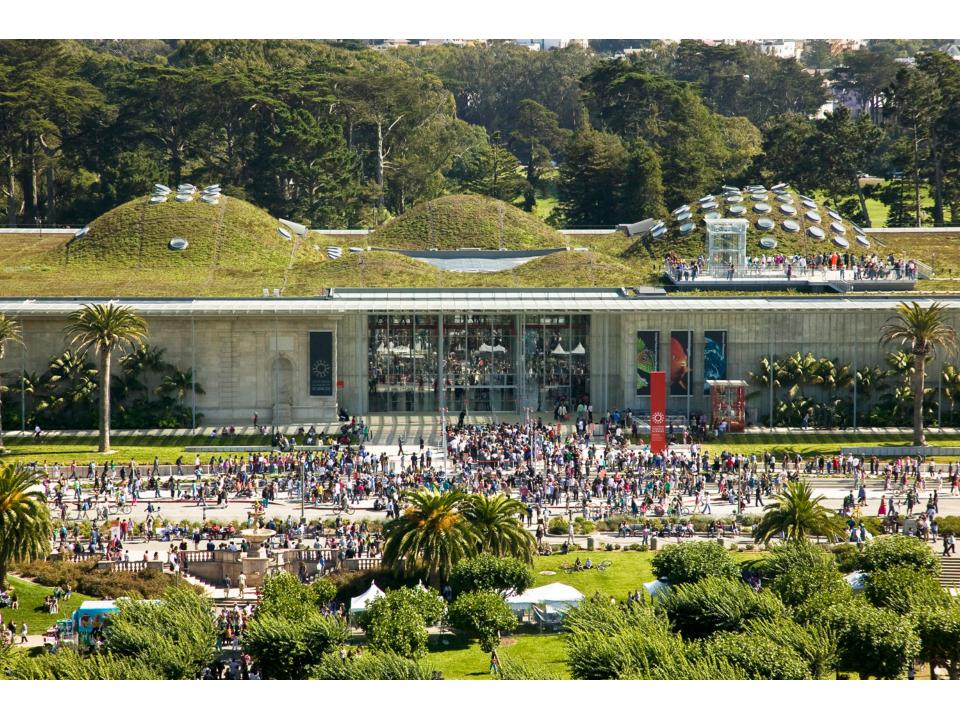
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BIOPHILIA OUR INNATE NEED TO CONNECT WITH NATURE



BIOPHILIC DESIGN FOR HEALTH & WELLBEING

COMMERCIALLY DRIVEN BY REITS & REALTY MANAGERS
RATINGS provide the INCENTIVE for MAJOR PORTFOLIOS of buildings

SOCIAL RETAIL – provide all social services within a building; Living & Work Environments = 90% time spent BIOPHILIC DESIGN FACILITATES: Exercise; Nutritional Food; Living Walls; Natural Light; Air Quality; Amenity Space; Relaxation, Meditation, Yoga, Walking, Bikes

ECONOMICAL BENEFITS:

INCREASES BUILDING VALUE / VALUE CAPTURE OF SPACE TENANCY LOYALTY / GREEN STATUS / INCREASE RENTAL VALUE

HUMAN BENEFITS:

Productivity; concentration; happier; improve self esteem; rehabilitate from stress; less sick days; enjoy the work environs; stimulates creativity





















Identifying heat sink zones in urban areas using heat images drone technology Creating Green Buildings with green roofs & living walls — mandate policy new devels Expanding over time in to Green Precincts — disciplined urban planning Connecting to Existing Greenspace (parks)— canopy via Green Corridors

Green Corridors connect to Natural Hinterlands

Migration of Wildlife through urban areas via green corridors to green roofs / living walls.

Identifying Urban Flood prone areas. (Same Strategy)

Onsite Stormwater Management

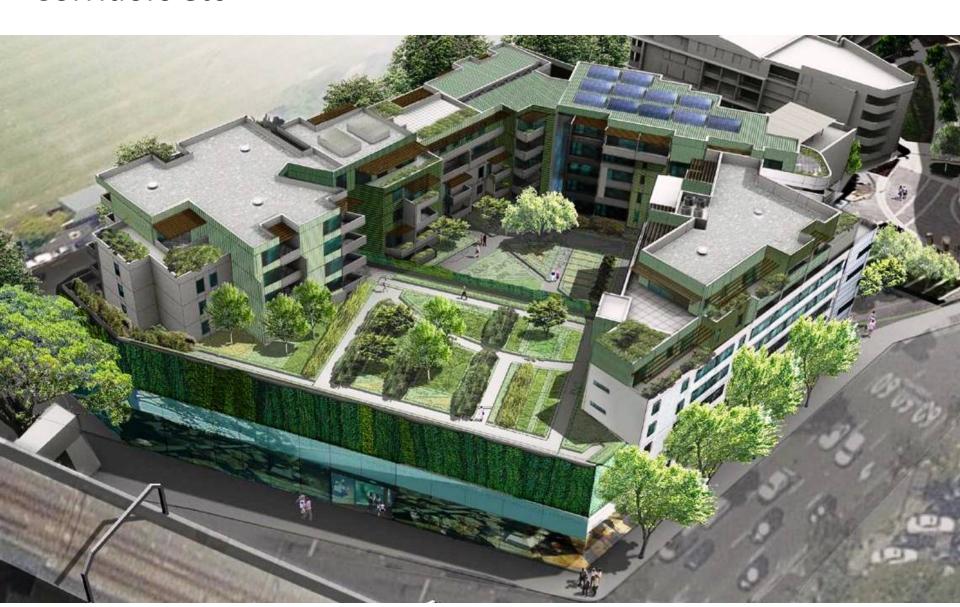
Water Table Recharge Improve Quality
Less Maintenance Cost Savings

SW Retention providing infrastructure relief

Filtration of heavy metals



Green Villages Green precincts connected by Green Corridors etc









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Conclusion:

Mainstream practice of greening the Built Environment will be popular, profound, exemplary & the right thing to do! There are so many benefits it's a no brainer so it is inevitable In time.

The Intention to Create Green Cities is Real.



AVAILABLE TECHNOLOGY / Drones Apps Monitoring Metrics

INTERNATIONAL GROUNDSWELL INCREASING favouring Green Tech

DRIVEN BY PUBLIC DEMAND Walking, Bikes, Food Nutrition, Enviro Quality

COMMERCIALLY DRIVEN BY DEMAND will also determine Policy to assist

COLLABORATION OF ALL THE DISCIPLINES OF LANDSCAPE & CONSTRUCTION; COMMERCIAL SECTOR; GOVERNMENT; SCIENCES & YOU the Public

ecoTECTURE WILL BE A MAJOR COMPONENT OF FUTURE GREEN CITIES



DESIGN IS THE FIRST SIGNAL OF HUMAN INTENTION

- > Is it created with the earth in mind?
- ➤ How will it be judged in the future?
- ➤ What is our intention as a species?









THANK YOU

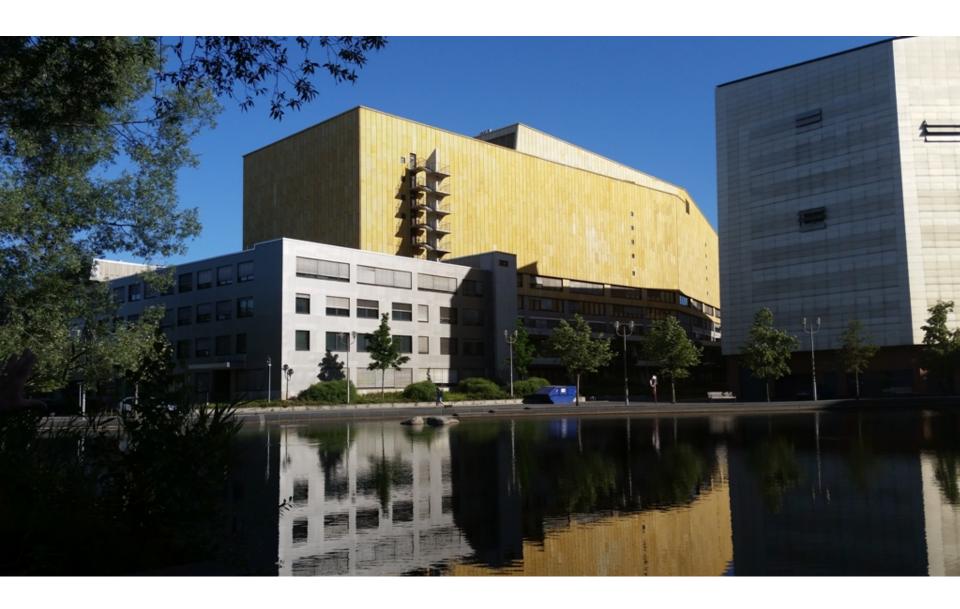
- AIPH FOR THE INCLUSION OF OUR VOICE
- •TO ALL THOSE BEHIND THE SCENES ORGANISING
- •TO THOSE GREENING THE WORLD
- **•TO THOSE SHARING THE MESSAGE**

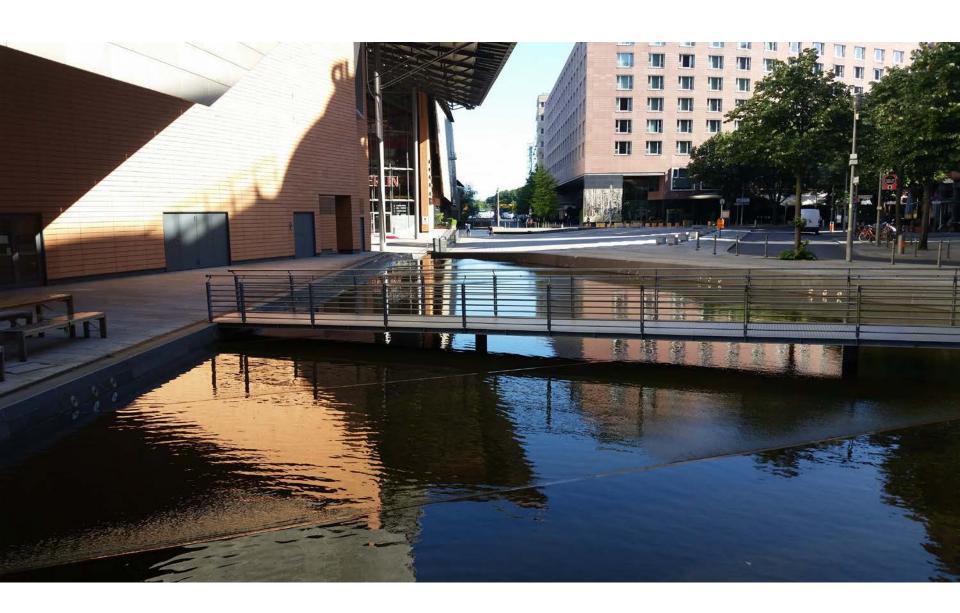


BERLIN



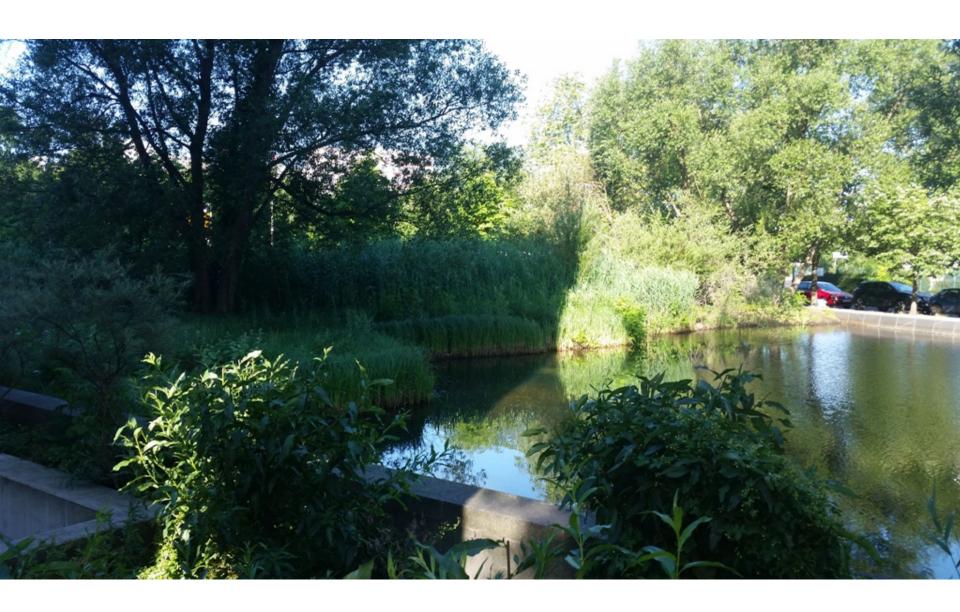








Regenwassermanagement Berlin Potsdamer Platz Landwehrkanal Überlauf Retention mit Wasserspiegelschwankung Nutzung Speicherung in Zisternen



CHICAGO

