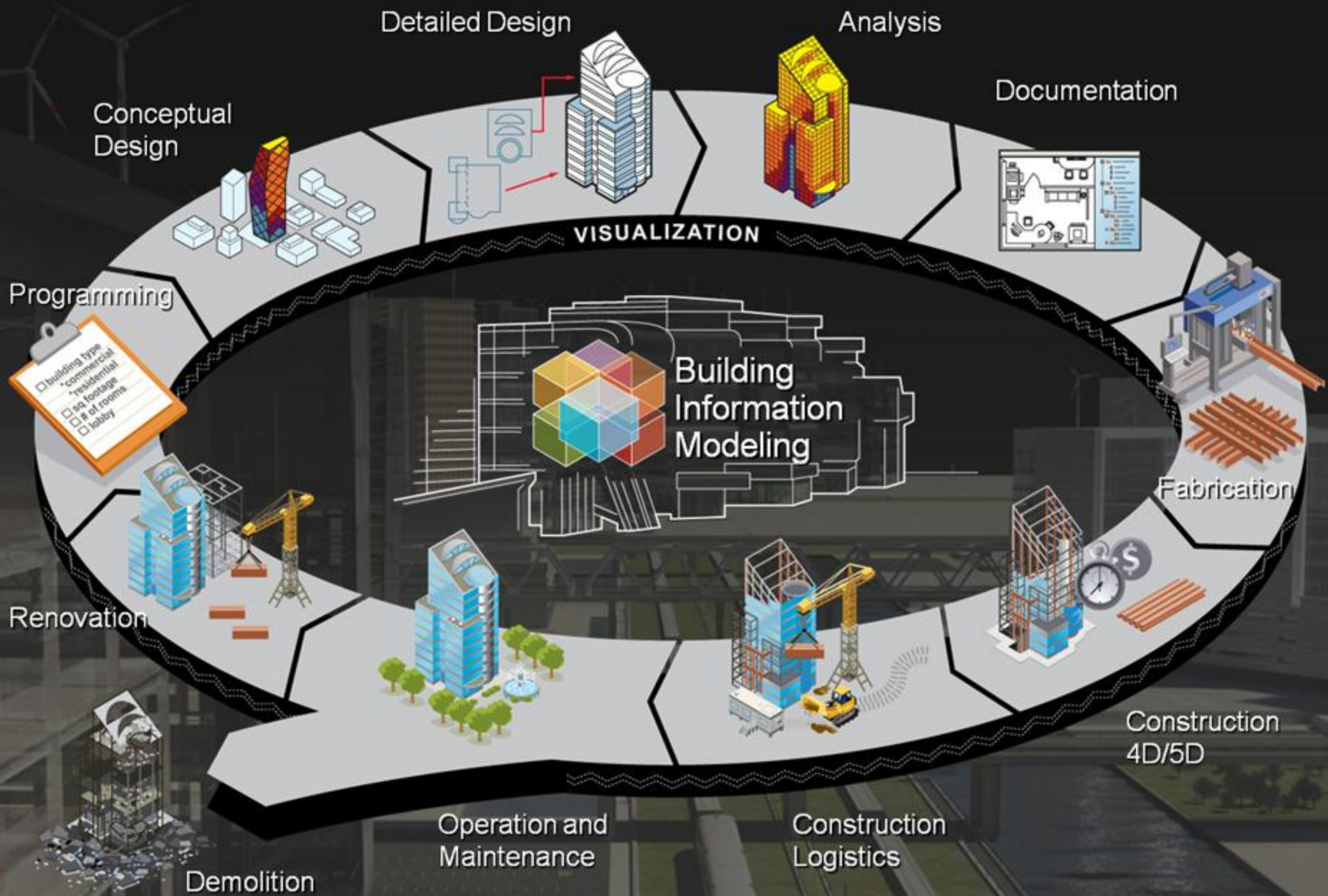


4. Uluslararası İnşaat Kalite Zirvesi 2012

İnşaat Endüstrisinde Rekabetin Yeni Trendleri

Y. Mimar Kerem Erginođlu

13.11.2012



















Sustainability

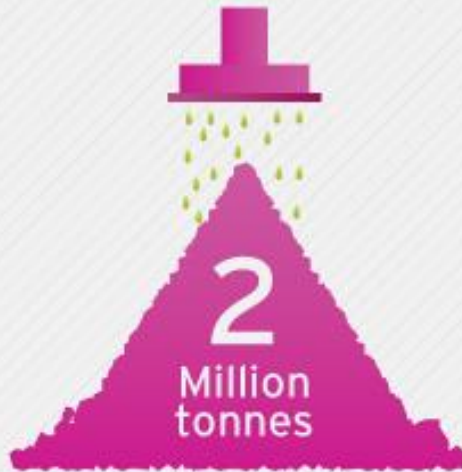
Across the lower Lea Valley, once scarred by disused industrial sites, a new urban park for the 21st century is taking shape, creating a new ecology of wildlife, plants and woodlands.



host government of the
Olympic and Paralympic Games

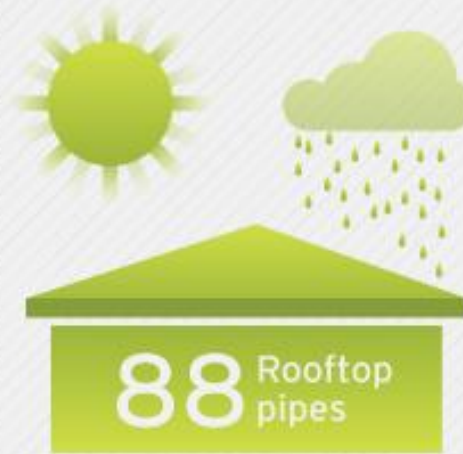
Improving the environment

2 million tonnes of soil were cleansed of pollutants, and 80% of this was reused on site during the build.



Green venues

88 rooftop pipes on the Copper Box, home of Handball and Goalball, roof will create natural lighting and harvest rainwater.



Innovative design

The lightest Olympic Stadium ever built, containing just 10,000 tonnes of steel.



Protecting wildlife

Over 2,000 newts were re-homed from across the lower Lea Valley during the Olympic Park build.



2,000
newts
re-homed

Creating habitats

The Park contains 525 bird boxes and 150 bat boxes home to thousands of species of birds and bats.



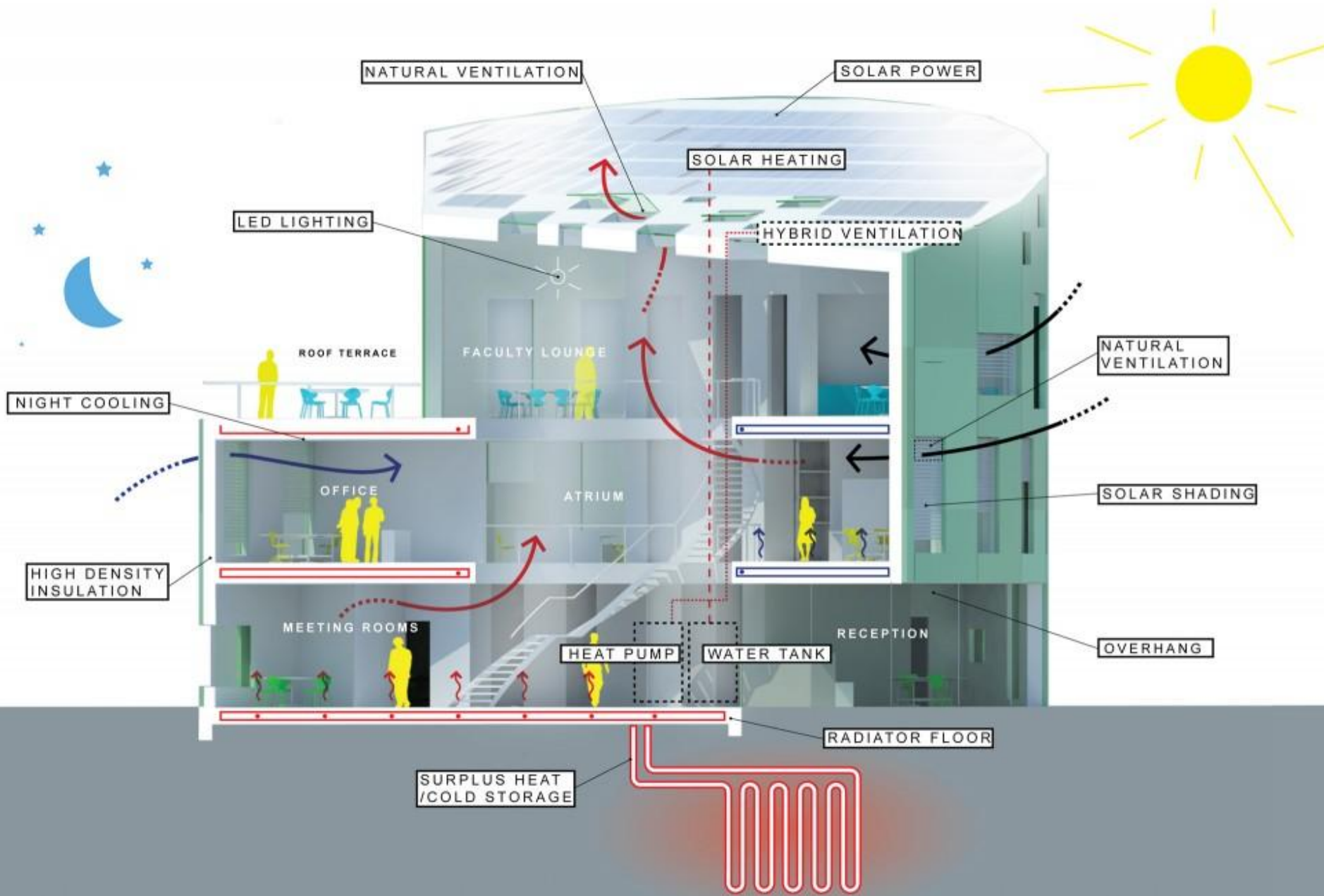
Grass roots

120,000 plants from 250 different species around the world have been planted in the London 2012 parklands.

120,000 plants







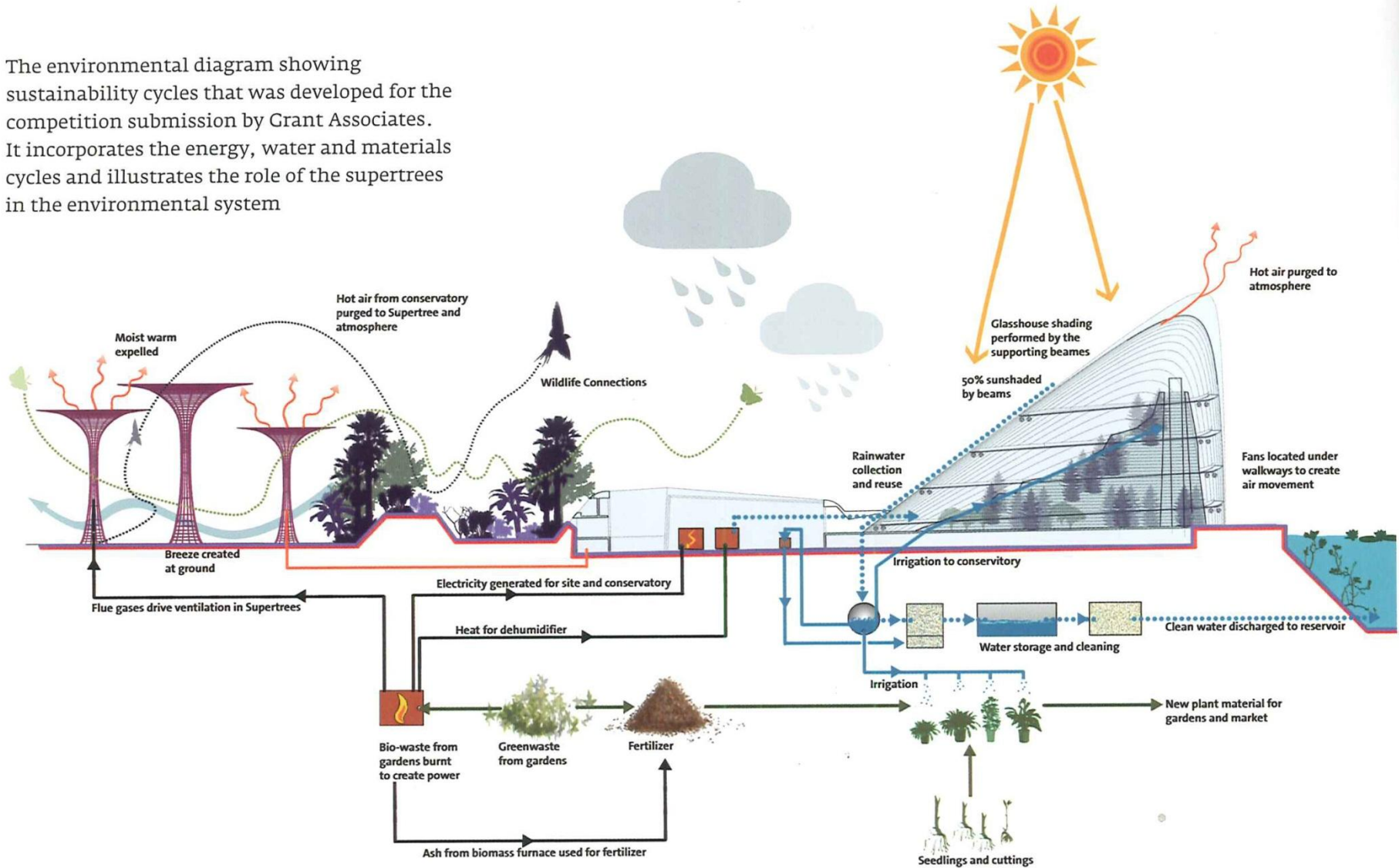


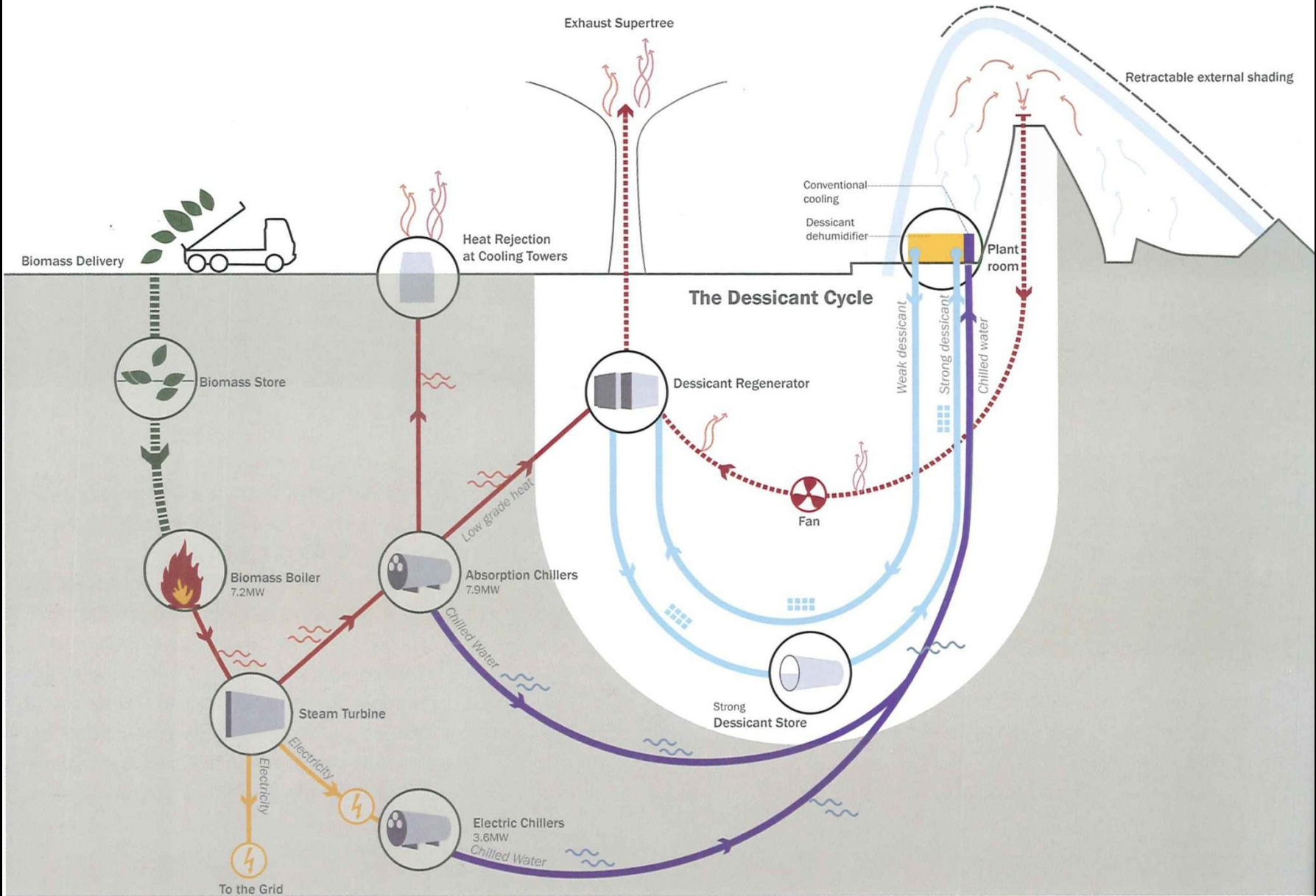






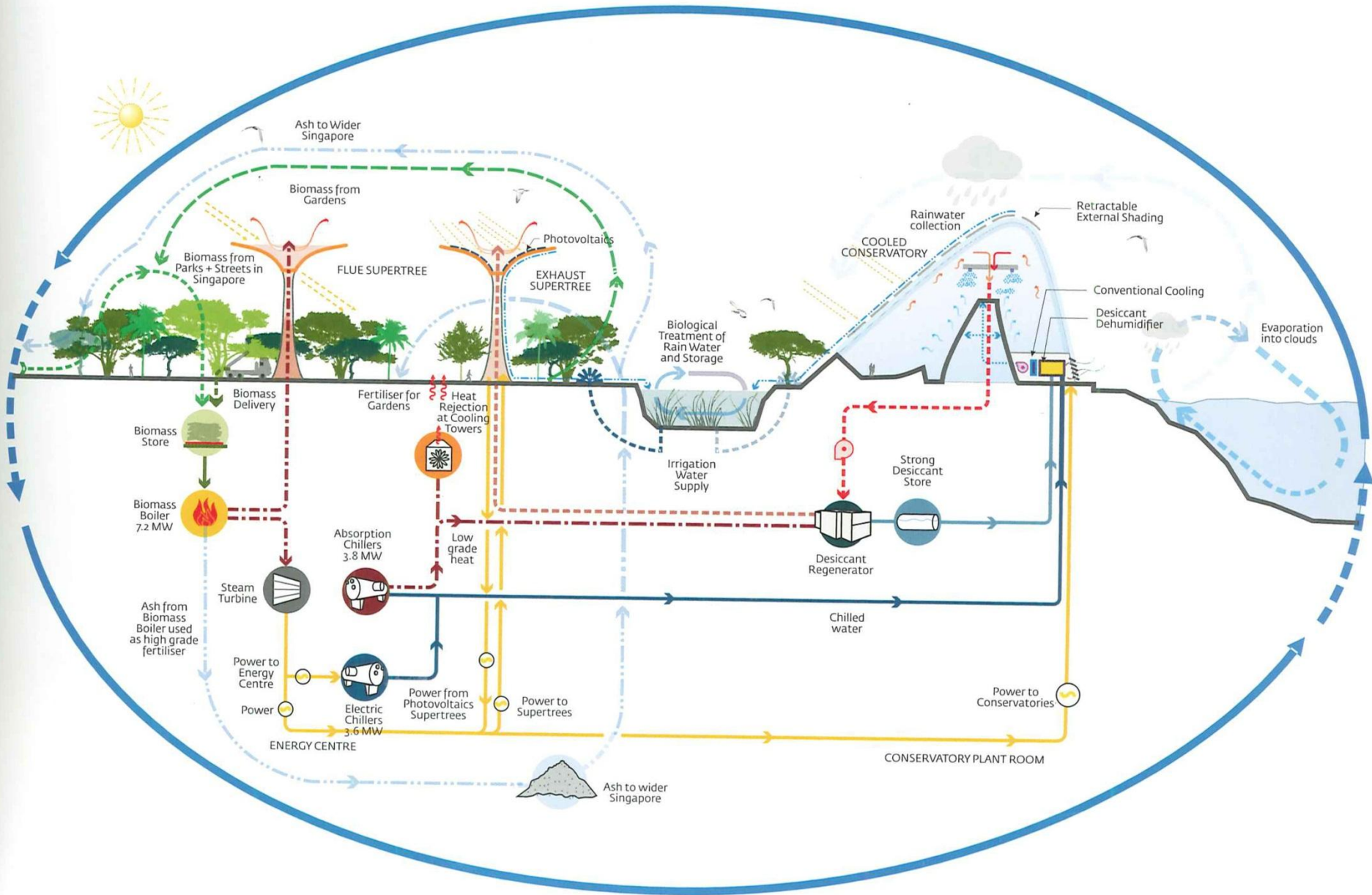
The environmental diagram showing sustainability cycles that was developed for the competition submission by Grant Associates. It incorporates the energy, water and materials cycles and illustrates the role of the supertrees in the environmental system



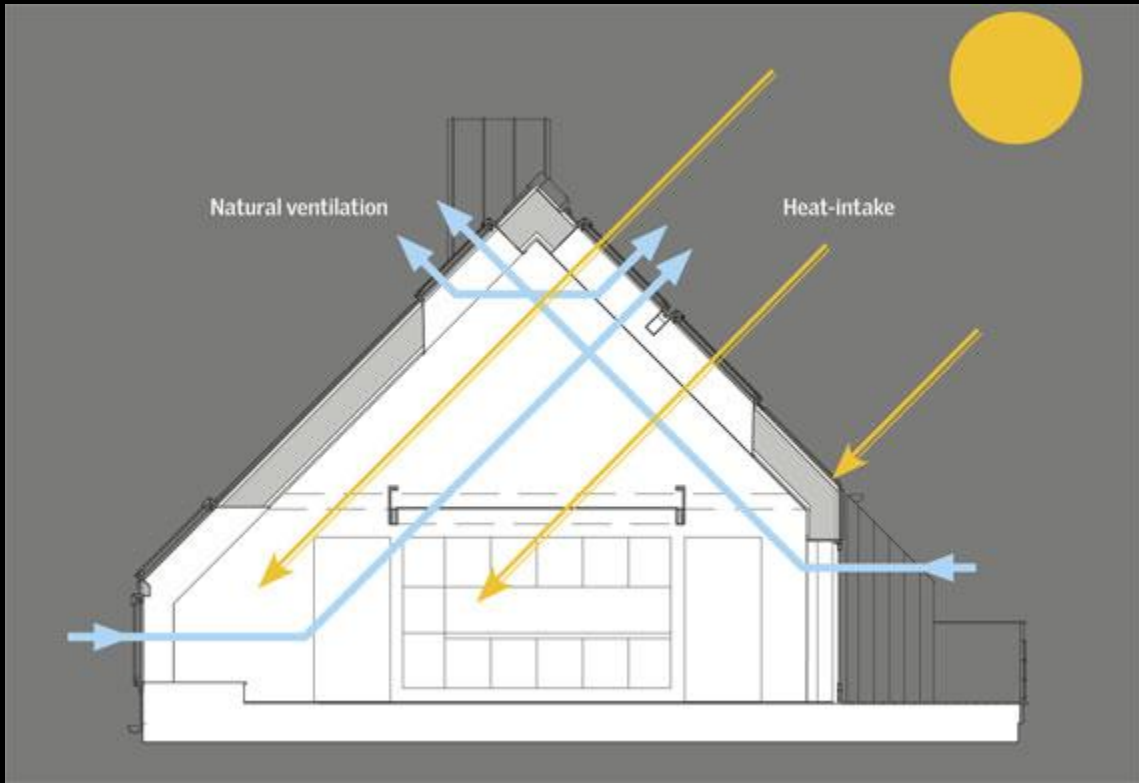


FRESH AIR CONDITIONING

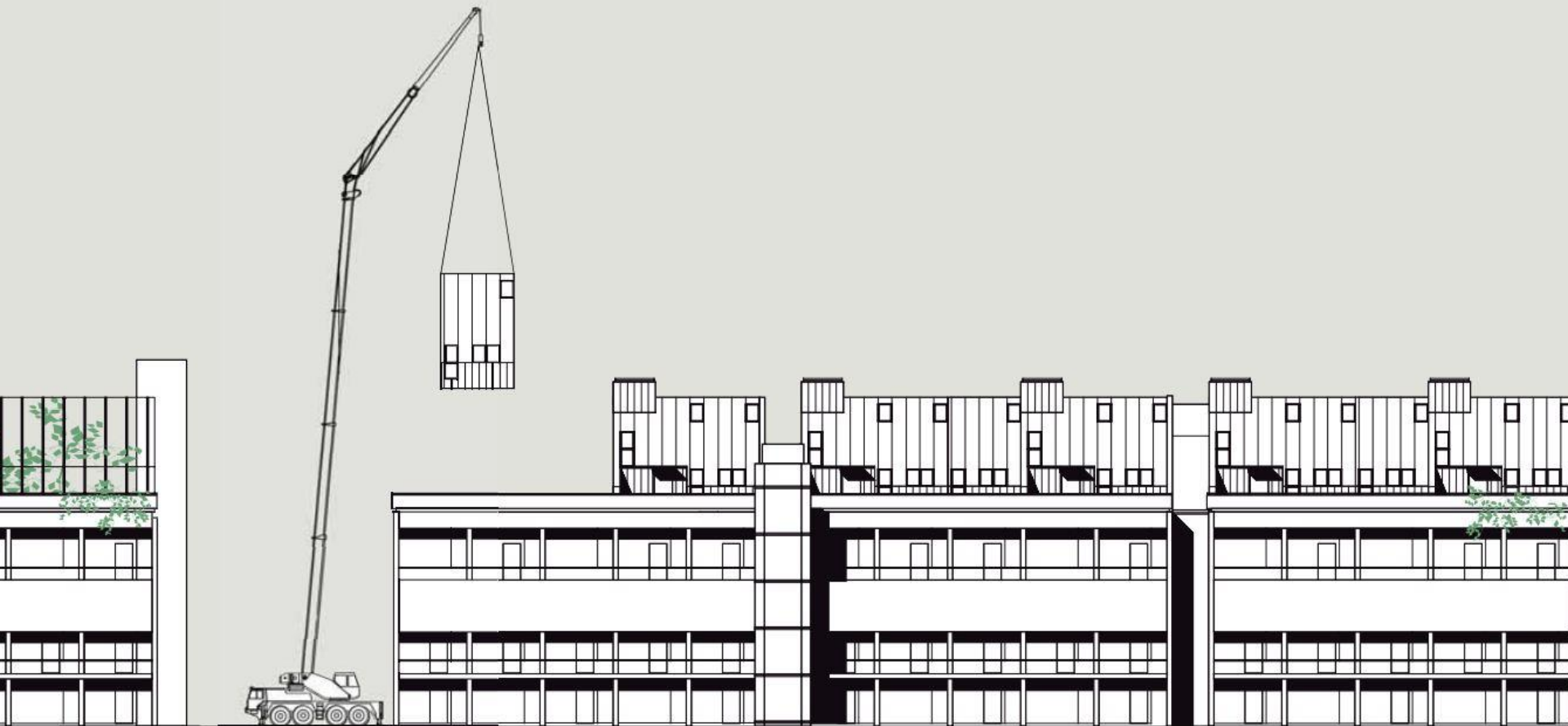
The Marina Bay South ecosystem













Masdar City

The world's first zero-carbon city
Being constructed in the United Arab Emirates



covering **6 sq km**



Costing **USD\$22bn**

work initiated in **2006** due to be completed in **2014**



home to **50,000** people



1,500 businesses



60,000 workers expected to commute daily

Automobiles will be banned within the city; travel will be accomplished via public mass transit and personal rapid transit systems, with existing road and railways connecting to other locations outside the city



Personal Rapid Transit



Light Rail Transit



Metro & High Speed Rail



Renewable resources

40 to 60 megawatt solar power plant, will supply power for all construction activity. Photovoltaic modules will be placed on rooftops to provide solar energy -130 megawatts

Wind farms will be established outside the city's perimeter capable of producing up to 20 megawatts

The city also intends to utilise geothermal power, in addition, there are plans to host the world's largest hydrogen power plant.

Water management - a solar-powered desalination plant will be used to provide the city's water needs, with approximately 80% of the water used being recycled. Waste water will be reused "as many times as possible," with this greywater being used for crop irrigation and other purposes.

Biological waste will be used to create nutrient-rich soil and fertiliser, and some may also be utilised through waste incineration as an additional power source. Industrial waste, such as plastics and metals, will be recycled or re-purposed for other uses.

Masdar Main Street



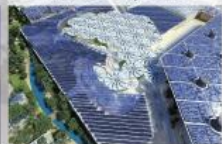
Masdar Institute



Masdar Headquarters



Masdar City Plaza





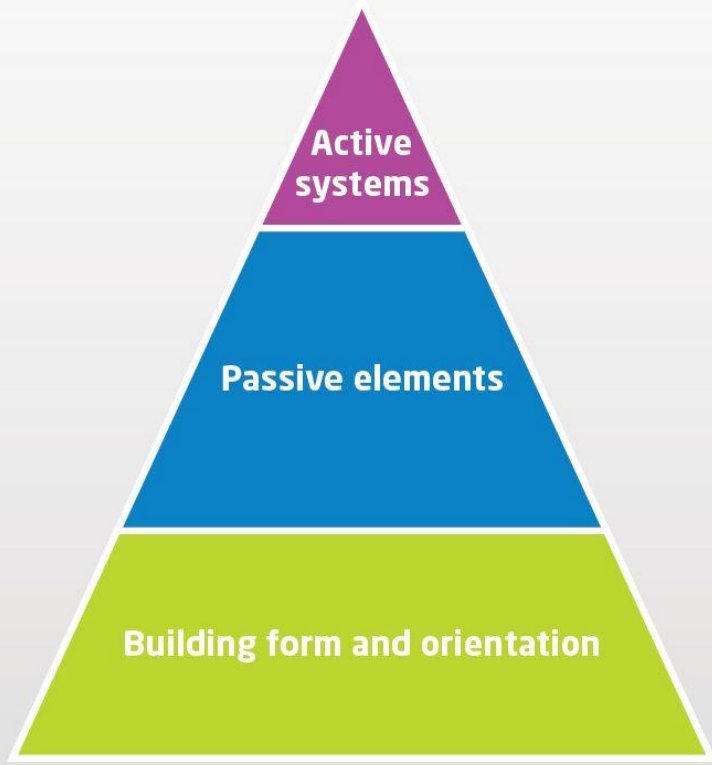




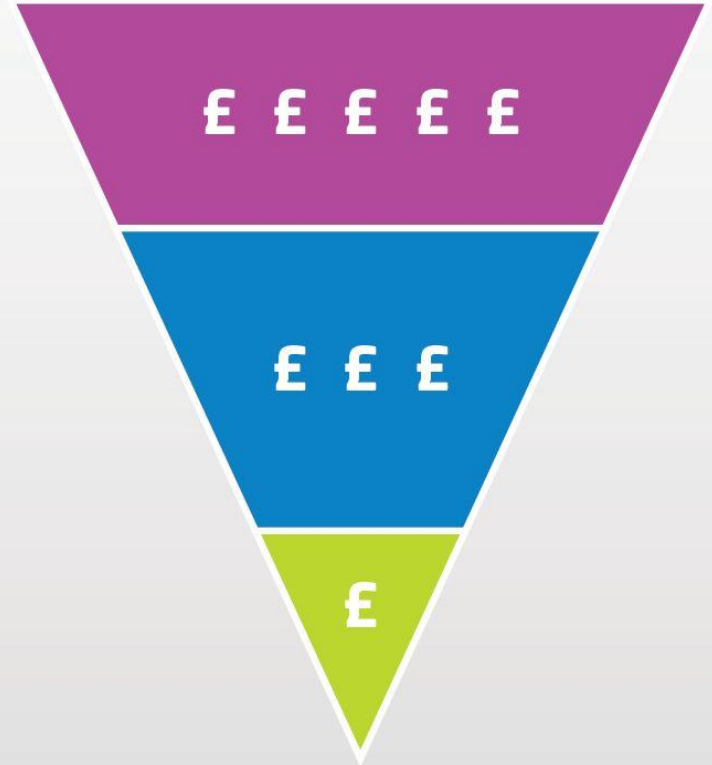








- Heat recovery systems
- Photovoltaics
- Activated blinds
- Responsive shading
- Deep space natural ventilation
- Orientation form



						Yakıt Tüketimi(lt/100km)			FİYAT(TL)	
		<u>Donanım</u>	<u>Motor(cc)</u>	<u>Beygir(HP)</u>	<u>Tork(Nm)</u>	<u>Ş.İ</u>	<u>Ş.D</u>	<u>ORT.</u>	<u>2011</u>	<u>2012</u>
Opel	Corsa	Essentia	1,3	75	170	5,8	3,9	4,6	36.633	37.547
Ford	Fiesta	Trend	1,4	70	160	4,8	3,6	4,1	34.605	37.790
VW	Polo	Trendline	1,2	75	180	4,6	3,3	3,8		38.200
Peugeot	207	Active	1,4	70	160	5,7	3,7	4,4	37.290	39.790
Peugeot	206+	Envy	1,4	70	160	5,4	3,5	4,2	31.750	34.750
Seat	İbiza	Reference	1,2	75	180	4,6	3,3	3,8	36.400	39.000
Renault	Clio HB	Extreme Edition	1,5	65	160	5,3	4,2	4,6	35.350	37.350
Renault	Symbol	Authentique	1,5	65	160	5,4	4	4,5	30.950	34.400
Citroen	C3	Attraction	1,4	70	160	5,3	3,8	4,3	35.600	37.050
Skoda	Fabia	Ambiente	1,6	90	230	5,1	3,6	4,2	37.300	
Toyota	Yaris	Fun	1,4	90	205	4,9	3,6	4,1		43.400
Fiat	G.Punto		1,3	75	190	6,2	3,5	4,5	33.112	34.749
Fiat	Punto Evo	Active	1,3	75	190	5,2	3,5	4,1	34.901	36.627
Chevrolet	Aveo HB	LS	1,3	75	190	4,3	3,4	3,8		35.632
Chevrolet	Aveo Sedan	LS	1,3	75	190	4,2	3,3	3,7		35.932
Hyundai	İ20Troy	Team	1,4	75	225	5,1	3,8	4,2		35.200
Hyundai	Accent Era	Start ABS ESP	1,5	110	235	5,6	4	4,6		33.700
Kia	Rio	Natty	1,4	90	220	5	3,8	4,3		39.050

THE CARS

2011 Petrol-powered Renault Fluence

- 184g CO₂ emitted per km travelled.¹



2011 Electric Renault Fluence ZE

- The battery stores 22 kWh of useable electricity for a range of 160 km.²
- Charged using either:
 - a. Grid-average electricity
 - b. 100% green power



