Sustainable Tower

CHOICE 1
There are 700 buildings in Saudi awaited LEED certification.

- King Abdullah Financial Distract.
- Princess Nora University.
- KAUST.
Al-Midra Tower

CASE STUDY 1
SAUDI ARAMCO, AL-MIDRA TOWER
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- SAUDI ARAMCO RECEIVES PLATINUM LEED CERTIFICATION.

SAUDI ARAMCO’S SOLAR POWERED AL-MIDRA TOWER IN DHAHRAN GARENERED 33 OUT OF 35 POINTS IN THE ENERGY AND ATMOSPHERE CATERGORY.-
Conclusion

All the offices are facing the façade.

The common use like food court and travel agencies are in the middle.

The building has open space in the middle that gives the feelings of mighty.

Usage of double facing windows.

The usage of solar power cells that reduce the amount of the energy waste.
1 BLIGH STREET, SYDNEY.

CASE STUDY 2
1 BLIGH STREET, SYDNEY.
1 BLIGH STREET, SYDNEY.
1 BLIGH STREET, SYDNEY.

-LOCATED IN ONE OF THE HEART OF SYDNEY.

DOUBLE SKIN FAÇADE

The components of the façade system include a double-glazed inner skin of high-performance glass and an outer skin of clear glass separated by an accessible cavity which is naturally ventilated and contains an automated blind.

Super cool

The design of 1 Bligh Street incorporates an innovative hybrid tri-generation arrangement that uses gas and solar energy to generate cooling, heating and electricity. An array of 500m2 of roof-mounted solar panels provides free cooling for the building, and in combination with the large trigeneration unit, reduces the load on grid power by more than 27%.
Minimising materials

20 per cent of all aggregate used in the concrete is recycled, and around 41 per cent of all cement required for the structure was replaced with industrial waste by-products. Ninety per cent of the steel used has a recycled content greater than 50 per cent.

Water

The first use of blackwater recycling in a high-rise office building in Sydney that will save 100,000 litres of water a day, equivalent to an Olympic swimming pool every two weeks. Rainwater recycling for irrigation of plants on rooftop.
Conclusion

The toilets and the stairs shouldn't be facing the façade. On the contrary, all the offices should be facing the façade to maintain maximum daylight.
MILAN’S VERTICAL FOREST TOWER

CASE STUDY 3
The Bosco Vertical, composed of two residential towers of 110 and 76 meters height, is currently under construction in the center of Milan, on the edge of the Isola neighborhood.

Plant irrigation will be made filtering and reuse of the grey waters produced by the building.
The vertical forest will offer its residents, as well as the rest of Milan’s populace, a cleaner, greener life, as it will produce humidity and oxygen, absorb CO2 and dust particles, and protect from radiation and acoustic pollution.
INTERIOR SHOT
Conclusion

- The façade is very interesting because of the amount of the trees in the balcony
- The plan has almost similar shape and the relationship between the spaces is right.
The typology of this kind of building is a high rise (vertical)
Youth Center

CHOICE 2
Youth Center in Rivas Vaciamadrid

CASE STUDY 1
Architects: Mi5 Arquitectos – Manuel Collado Arpia y Nacho Martín Asuncián
Location: Rivas-Vaciamadrid, Madrid, Spain
Collaborators: Eider Holgado, Richar y Diego Barajas
Engineering: Juan Travesí (Estructuras)
Contractor: Dragados
Project Area: 1,834 sqm
Budget: 2,344,502 €
Project Year: 2006
Construction Year: 2009
the single-storey building features faceted interior surfaces in clashing colours.
ELEVATIONS AND INTERIOR SHOTS
THE PLAN
The Lil/Euralille Youth Centre
CASE STUDY 2
The Lil/Euralille Youth Centre will comprise a contorted triangular building, housing a youth hostel, a kindergarten and offices within its three corners.
These three blocks will each feature cantilevered corners and are to surround a central Triangular courtyard.

This courtyard will slope up to a roof garden above the kindergarten and step onto decks above the youth hostel.
The Lil/Euralilie Youth Centre

CASE STUDY 3
Located in Qingpu in the west of the city, the centre comprises a grid of rectilinear buildings that are connected to one another by a series of bridges, terraces and enclosed walkways.

The largest of the fourteen buildings has white-rendered walls and encloses an open-air courtyard, while the others house classrooms, dance studios, a library, a gallery, offices and a theatre auditorium.
Qingpu Youth Center, Shanghai
Whole theme is based on such idea: on the premise of adapting adjacent urban scale, a small inner public space of human scale will be created in order to reconstruct the memory of traditional townscape scale.
Building Area: 14360 sq.m
Site Area: 10906 sq.m
SECTION AND ELEVATION