

Flora Exhibition Hall

**Green building, Platinum level
according to the criteria for
evaluating energy
sustainability and
Thai Environment (TREES-NC)
from the Thai Green Building
Institute (TGBI)**



Reducing energy use and reduce the destruction of the atmosphere.

- Use cold water from the project's liquefied natural gas (LNG) conversion process to cool the building's air conditioning system to replace using cold water from the water cooler (Chiller).
- The building can reduce total electrical energy use by up to 43% compared to general buildings.
- Use renewable energy from Solar Cells up to 6% (155,232 kWh/year) of estimated electricity use throughout the year.
- An automatic building control system (Building Automation System: BAS) has been installed for inspection. Collect building potential data and control it from a central location to facilitate building management and adjust the system to save energy while the building is in use.



Impact protection The environment surrounding the project

- There are measures to prevent environmental pollution throughout construction, including water pollution, such as preventing ground erosion and soil sedimentation, and air pollution, such as preventing dust.
- There is an area to separate waste according to each type, such as wet waste, hazardous waste, paper, metal, glass, and plastic, to promote reuse or recycling.
- Arrange the cooling unit of the air conditioning system. More than 4 meters away from neighboring land so as not to cause distress to the nearby environment.
- Choose glass with a reflectivity of less than 15% to reduce light reflection that affects nearby areas.
- An electric meter is installed in the wastewater treatment system. To be able to check that the wastewater treatment system is working all the time.



LNG Map Ta Phut Terminal 2 (LMPT 2)
PTT LNG Company Limited



SUPPORT THE USE OF ENERGY-SAVING VEHICLES

Provide parking and charging points specifically for electric vehicles (EV chargers).



GREEN AND OPEN SPACES OF THE PROJECT

- There is a green area of 66% of the project's open ecological area, which is an infiltration area to help reduce flooding problems.
- The building is covered with a green roof to prevent heat from entering the building and reduce the urban heat island effect.
- The project has planted more than 1 tree per 100 square meters of open space.



CONSTRUCTION MATERIALS AND RESOURCES

- Construction waste management, where more than 90% of all waste is recycled or reused.
- The use of recycled materials accounts for more than 20% of the value of construction materials.
- The use of local materials accounts for more than 30% of the value of construction materials.



REDUCE ATMOSPHERIC DEGRADATION

- Use environmentally friendly fire extinguishers (no CFC, HCFC or HALON)
- Use refrigerants in air conditioning systems that do not destroy the ozone layer (no CFC, HCFC-22)



SAVE WATER

- Choose water-saving sanitary ware that can reduce water usage from general buildings by up to 54.72%
- There is a large rainwater tank to collect rainwater for watering plants within the project.



INDOOR ENVIRONMENTAL QUALITY

- Have a fresh air supply system to ensure good indoor air quality.
- No smoking inside the building. Smoking areas must be more than 10 meters away from the building.
- Install dust-trapping carpets at the building entrance to reduce pollution entering the building.
- Install air filters in the air conditioning system to reduce outdoor pollution at the MERV13 level.
- Design the air conditioning system to provide users with comfort according to international standards (ASHRAE 55-2004).
- Design lighting systems that are sufficient for the type of use according to the standards of the Lighting Promotion Association of Thailand.
- Design personal lighting systems (Task Lighting) that can independently control the on-off of lights in the work areas of general users.
- Use carpets for indoor use that are low in toxic substances.
- Use glue, grout, paint, and coatings that are low in VOCs.
- Use wood that does not contain urea-formaldehyde or is E0 material.

