



### SOLAR ENERGY

- Photovoltaics and solar thermal panels as renewable energy sources.

### OUTDOOR SHADING

- Fixed or movable shading elements and windows with reflective foils reducing sunlight and thus overheating the building.

### OPTIMIZING ENERGY CONSUMPTION

- Energy management, operation control and automation.
- Detailed measurement and analysis of consumption data.

### ENVELOPE CONSTRUCTION

- Well insulated walls, roofs and floors.
- Suitably oriented insulating tight windows and doors.

### HEATING, COOLING AND VENTILATION

- Controlled ventilation with heat and humidity recovery.
- Use of night pre-cooling by ventilation in summer.
- Utilization of waste heat from cooling.

### ENERGY FROM EARTH AND AIR

- Heat pumps take heat from the surroundings and pass it to the building for heating and hot water.

### GREEN ROOFS AND FACADES

- Rainwater retention in place.
- Cooling of premises in the building and its surroundings thanks to water vapor.
- Lower energy consumption for summer cooling of the building.
- Pleasant and natural environment for users.

### WATER MANAGEMENT

- Economical fittings.
- Rain and purified gray water for flushing.
- Heat recovery from waste water for preheating.

### BUILDING INCORPORATION

- Appropriate orientation towards cardinal points.
- The use of brownfields before land seizure.
- Preventing the heat islands of cities by greenery on roofs and facades.
- Promoting the biodiversity of natural plant and animal species.
- Elimination of light pollution of the sky.
- Available amenities and greenery.

### SUSTAINABLE MATERIAL

- Building as a material bank: principles of circular economy.
- Recyclable and recycled materials and demountable elements.
- Materials with lower carbon footprint.
- Natural materials free of harmful substances.

### ECOLOGICAL TRANSPORT

- Facilities for cyclists and connection to cycle paths.
- Use of public transport.
- Charging station for electric cars and electric bikes.

### HEALTHY INDOOR ENVIRONMENT

- Fresh air provided by air conditioning with recuperation, possibility to open the window.
- Thermal comfort in summer and winter, the possibility of individual temperature control
- Natural daylight and intelligent artificial lighting control.
- Acoustics with absorbing surfaces
- Ergonomic interior design.
- Motivation for movement and active rest.
- Greenery in the interior promotes concentration and relaxation.

### WATER MANAGEMENT

- Collecting rainwater for flushing and irrigation of greenery.