

# Energy Solutions Dept.



#### Presentation content

- Energy solutions department
- Technologies
- Project stages
- Project solutions





### Energy solutions department

# The department is responsible for providing complete solar water heating solutions

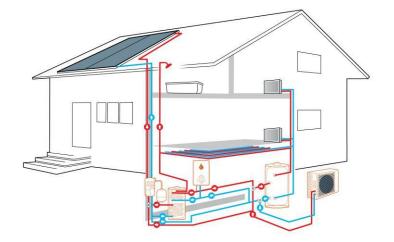
- Analyzing project data
- Preliminary design and ROI calculation
- Quotation
- Detailed engineering plan
- Installation & supervision
- After sale technical support





### Technologies

- Solar thermal collectors
- Water storage tanks
- Backup: heat pumps, electricity, gas, oil
- Water treatment
- Water circulation systems engineering

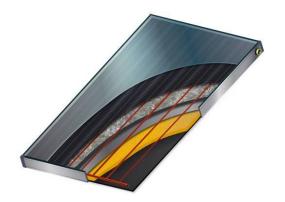




#### Collectors

- Absorber Material
- Absorber coating type
- Insulation
- Solar glass
- Casing type
- Risers & manifolds diameters
- Back plate
- Aluminum foil







## Storage tanks – up to 300L

- Galvanized casing
- Polyurethane insulation
- Steel tank
- Enamel coating
- Electric back up
- Sacrificial anode
- Thermostat
- Spiral heat exchanger







## Large storage tanks: 1,000-15,000L

- Galvanized casing
- Polyurethane/mineral wool insulation
- Steel tank
- COPON KS16W internal coating
- Working pressure 6 bars. Test pressure 10

bars





### Heat pump back up

- Heat output- 3.5 45 kW
- Water temp up to 60 C
- Combined hybrid systems





### Oil back up

- Capacity up to 150 kW
- Water temp up to 100 C





### Gas back up

- Capacity up to 150 kW
- Water temp up to 100 C





#### Water treatment

- Anti scale filter for scale prevention
- Anti freeze solution for freeze protection
- Legionella prevention
- Other filters

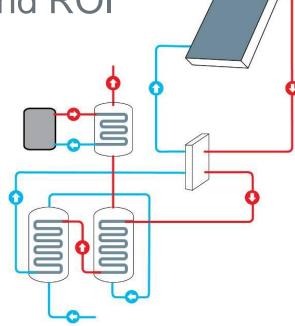






### Project stages

- Fill project information questionnaire
- Analyzing questionnaire and climate data
- Preliminary system design and ROI
- Quotation
- Detailed system design
- System delivery
- Installation and supervision
- After sale support



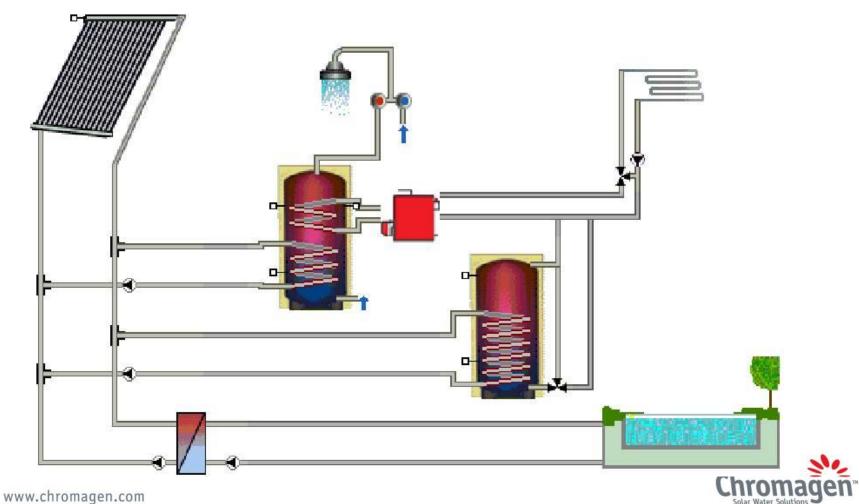


### Projects solutions

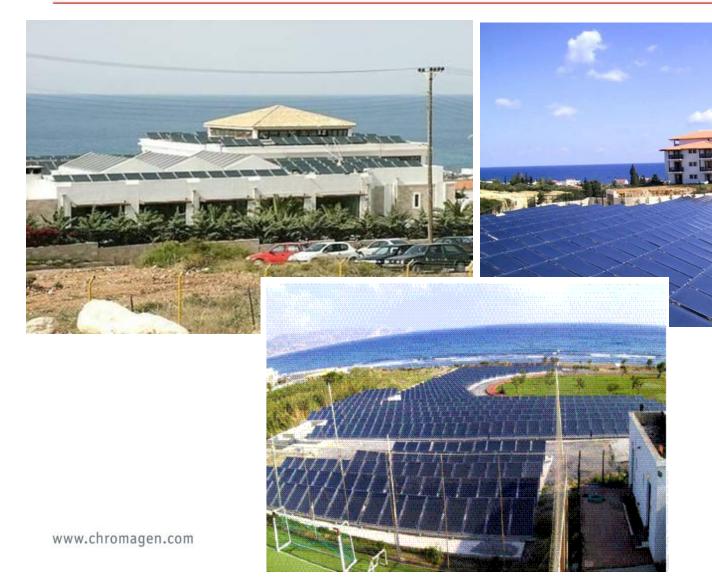
- Apartment buildings
- Hospitals
- Senior homes
- Factories
- Sport facilities
- Schools
- Hotels and more...



# Water circulation system example

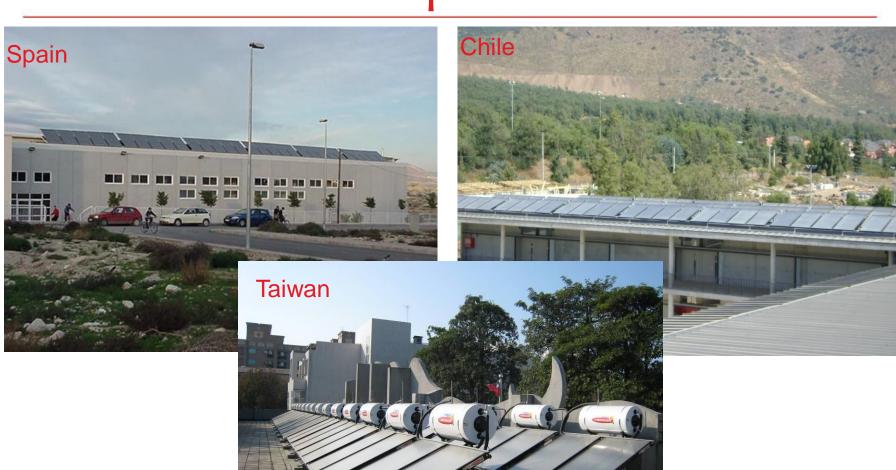


#### Hotels in Greece





# Hospitals





# Hospitals





# Projects in Ghana







# Apartment buildings





# Dispensaries in Tanga Tanzania









#### Dar Es Salaam Kunduchi





#### Rural area in Tanzania



























# Thank You





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