



Once Upon a time



entalpicamade to last



2016



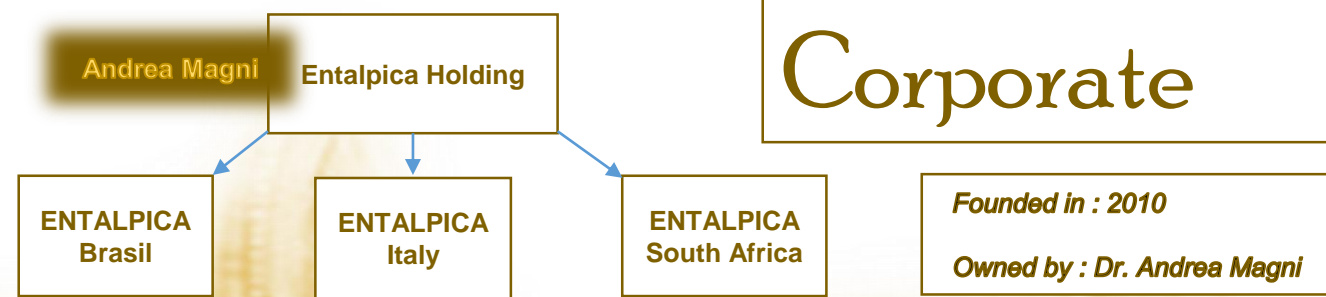
1. Mission
2. Group /Corporate
3. Financial (ref. attachments)
4. Market
5. Products
6. Italy
7. South Africa
8. Brasil



Mission

entalpica group working to achieve in the next ten years the leader position in the renewable and high efficiency energy production.

**Energy Legend
&
Forest Creator**



Corporate

Founded in : 2010

Owned by : Dr. Andrea Magni

entalpica holding srl

Italia sede legale : Via San Rocco n.65 20874 Busnago (MB)

C.F. e P.IVA IT06932980961

REA: MB – 1868232

www.entalpicaholding.com

info@entalpicaholding.com



Entalpica holding is the company engaged in the research and development of Moringa oleifera that is an agricultural-industrial investment project.

Entalpica holding company specialized in the study and implementation of alternative energy solution.

The investment is focused on a extensive cultivation of moringa plant to obtain, vegetable oil to be used as biofuel or human food and oil cake as a base product for animal feed.

Entalpica Brasil pty ltda

Society under Brazilian law, made to manage the agribusiness operation and energy market.

The administrative and fiscal management is entrusted to Gestus company while the legal activity with Ribeiro & Cime offices in relationship with the administrators of entalpica Brasil and Italy.

The company will rent about 1,000 ha of land for long term of 45 years and the company capital / investment will be around of EUR 2,000,000.

Sale and management of cogeneration systems in the territory.

Entalpica spa

Society under Italian law, manage the 15% of domestic market with own combined heat and power system.

Under construction the new products capable to fulfill the houses need.

The administrative and fiscal management is entrusted to Colombo offices while the legal activity with Martinelli offices in relationship with the administrators of entalpica Italy.

The company manage and control the subsidiaries base in South Africa and Brasil .

Entalpica South Africa pty ltd

Society under South African law, made to manage the agribusiness operation and energy market.

The administrative and fiscal management is entrusted to Marcer company while the legal activity with BBM offices in relationship with the administrators of entalpica South Africa and Italy.

The company will rent about 1,000 ha of land for long term of 45 years and the company capital / investment will be around of EUR 2,000,000.

Sale and management of cogeneration systems in the territory.



Group

Company Organization

- 1 Director
- 2 Staff
- 7 Sales
- 2 engineer /Consultant
- 20 Partners





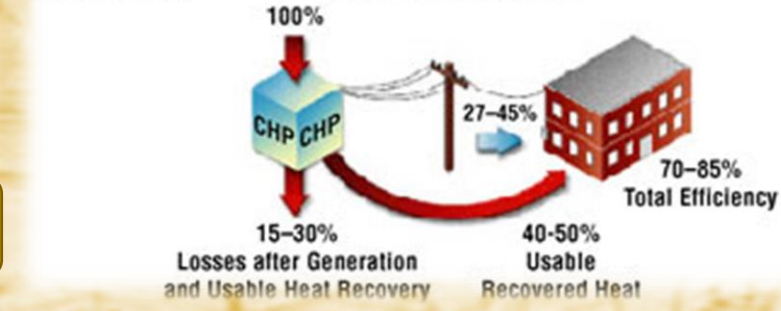
Comparison between Traditional system and Combined heat and power

Mission



Traditional System

C.H.P. System

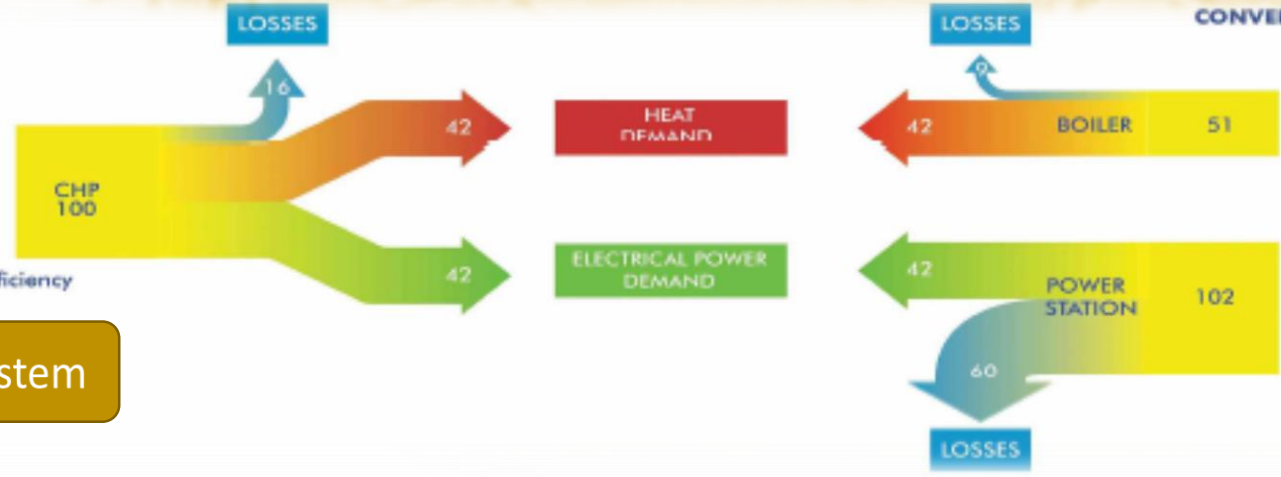


CHP OVERALL EFFICIENCY 84%



less fuel, less carbon dioxide, more energy efficiency

C.H.P. System

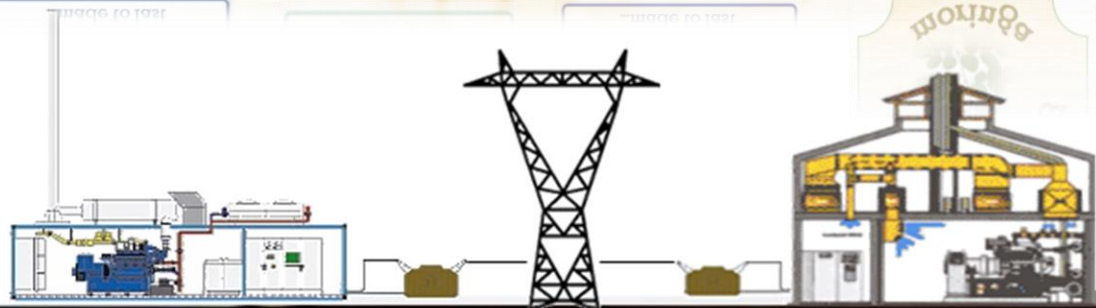


Traditional System

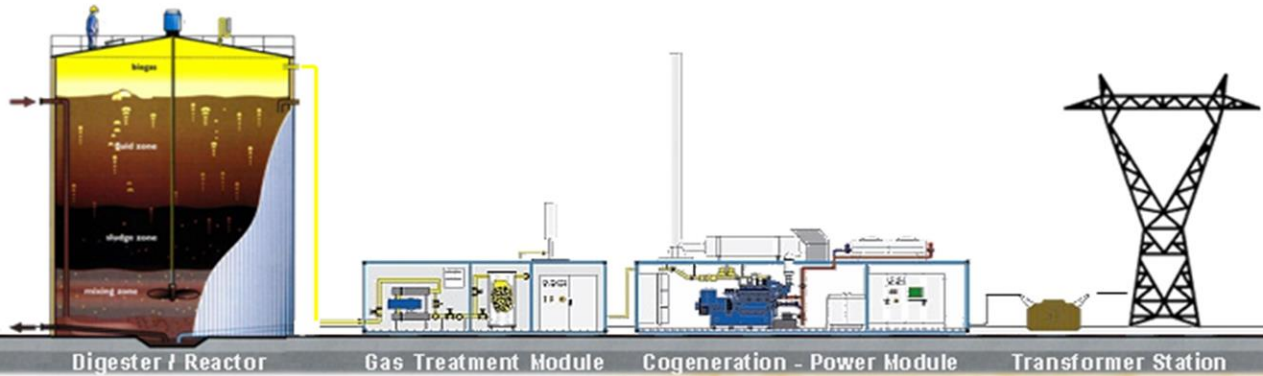


Combined heat and power efficiency

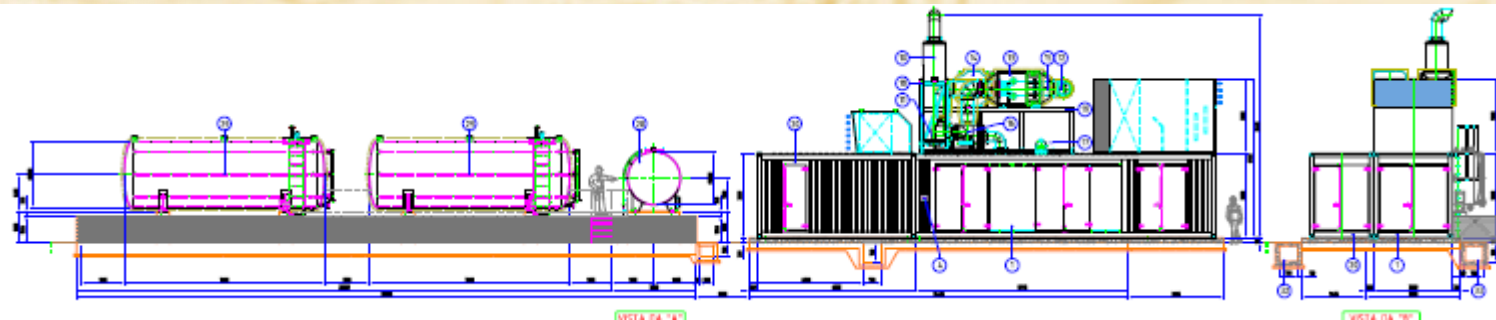
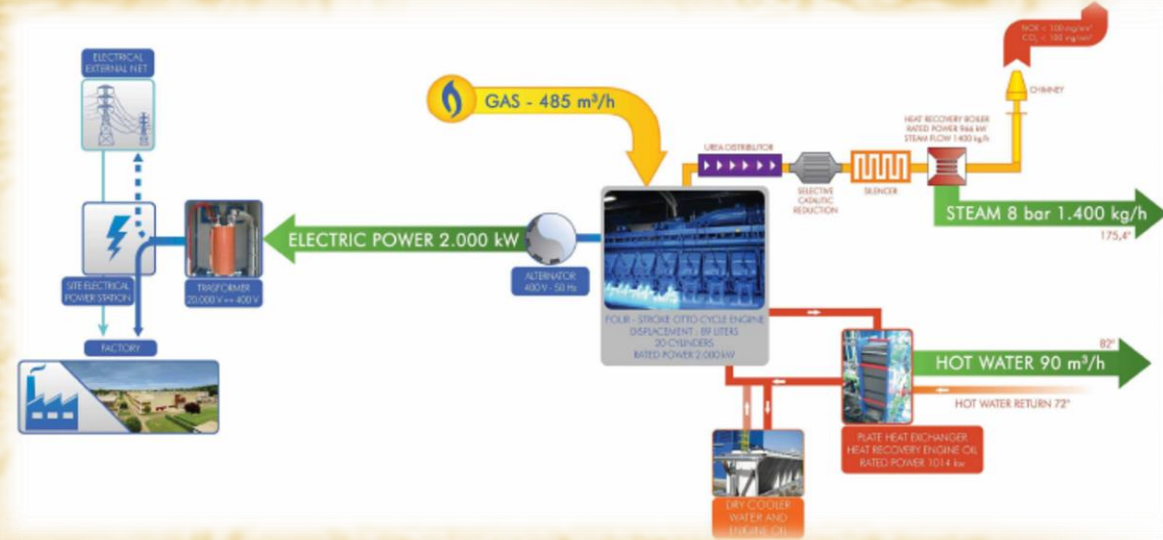
Mission



Natural Gas Cogen Power Module or alternatively Inside Gas Cogen Installation

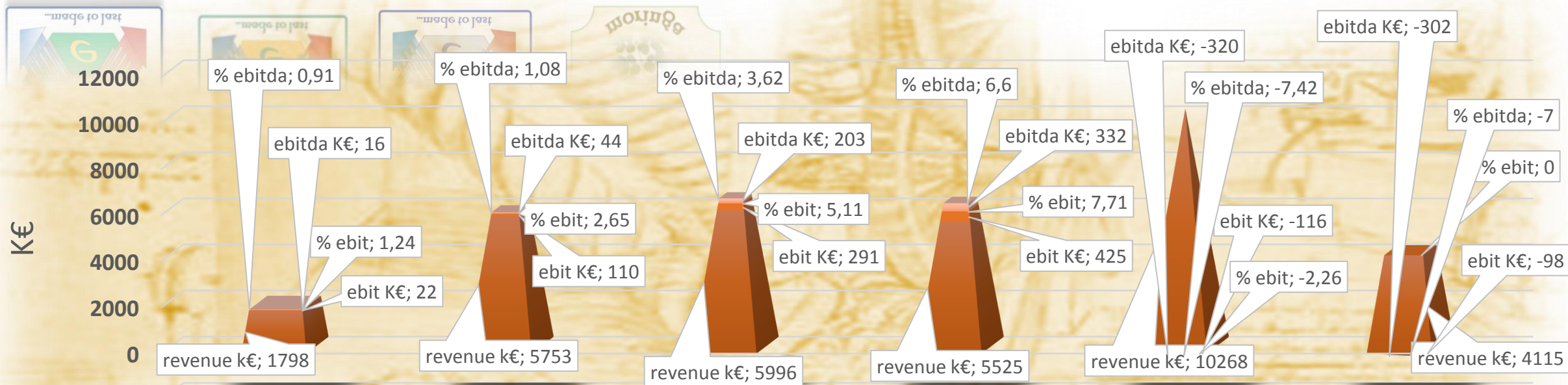


Digester / Reactor Gas Treatment Module Cogenation - Power Module Transformer Station





Financial Highlights



	2010	2011	2012	2013	2014	2015
■ % ebitda	0,91	1,08	3,62	6,6	-7,42	-7
■ ebitda K€	16	44	203	332	-320	-302
■ % ebit	1,24	2,65	5,11	7,71	-2,26	0
■ ebit K€	22	110	291	425	-116	-98
■ revenue k€	1798	5753	5996	5525	10268	4115

years

■ revenue k€ ■ ebit K€ ■ % ebit ■ ebitda K€ ■ % ebitda



Market

Cogeneration

Trigeneration

	Hospitals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Shopping Centers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Supermarkets	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Schools	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Hotels	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Sporting Centers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Public Offices	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Food Processing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Industries	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Industries	<input checked="" type="checkbox"/>	
	District Heating	<input checked="" type="checkbox"/>	

Market position :

- ❖ *Big Plant, : STAR , 15% Italian Market, in progress Europe, Brasil and South Africa, It's one of the ten best European company*
- ❖ *Medium Plant, market position : Under study and in progress.*
- ❖ *Lowest Plant, market position : Ready to catch it.*



Products

High specialization and quality

Research and development, design, sales, construction, installation and erection and maintenance of industrial and civil power plants of COMBINED HEAT and POWER using innovative cogeneration and trigeneration systems (CHP) .

R & D, Research and development in collaboration with local universities to: increase energy efficiency, reduction and control of pollution and emissions.

The most complete and extensive range available on the market suited to every need from the Taylor made plants to smallest size plants suitable for houses.

1. FOSSIL fuels, diesel, gasoline and natural gas, RENEWABLE, biogas (anaerobic digestion, pyrolysis, landfill gas) and vegetable oils;

- ❖ TERA, from 400 kWe to 4500 kWe
- ❖ MEGA, from 240 kWe to 360 kWe
- ❖ NANO, from 120 kWe to 200 kWe.

2. The INDUSTRIAL applications anticipating the new European regulations with low fuel consumption;

- ❖ PICO from 20 kWe up to 100 kWe

3. Civil applications for private;

- ❖ FEMTO, from 2 to 10 kWe

4. Gas turbine. Engineering. Maintenance and service. Production and sale of electricity with plants from 5,000 to 22,000 kWe

5. Emergency diesel generators

6. Oil & Gas – off shore emergency generating sets .

7. Maintenance Service and Conduction - Full-Service

8. SUPER FULL-SERVICE: selling fuel plant, developed and manufactured by the subsidiarie companies: Entalpica Brasil Ltda and Entalpica South Africa Pty Ltd.

9. Biogas-technology systems: According to manufacturers of anaerobic digesters.

10. TURBOCOLD, innovation with the super freezer for production of cold water at 7 ° C and the freezing up to -25 ° C.

11. ORC turbines sale and integration in its cogeneration plants. Converting thermal energy into electricity.

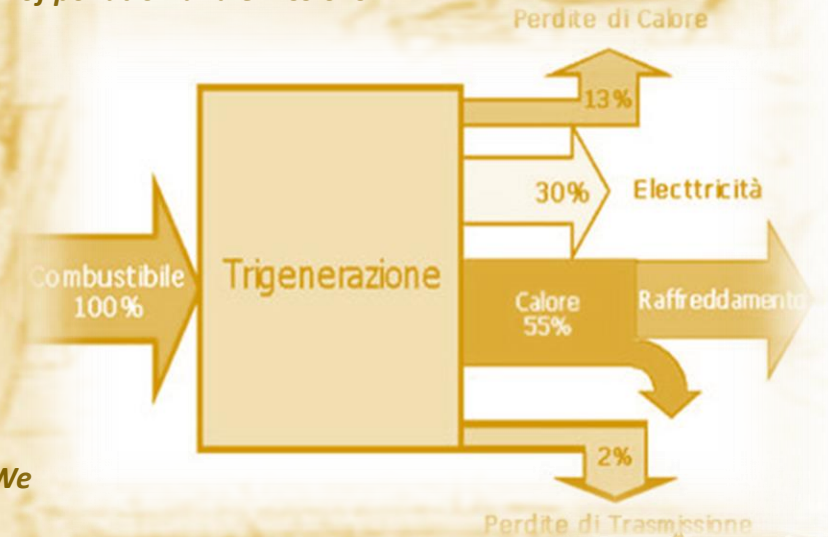
12. SCR (Selective Catalytic Reducer) design, development, production, marketing and sales.

13. The solar cogeneration and trigeneration.

14. The energy production with fuel cells and hydrogen

15. PENTAGEN, the union of trigeneration, photovoltaic panels and VERTICAL WIND SAILING.

16. HOME TECHNOLOGY, new frontier of ENERGY EFFICIENCY





Products

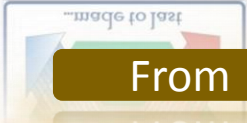


tera

From 400 to 4500 KWe



Products

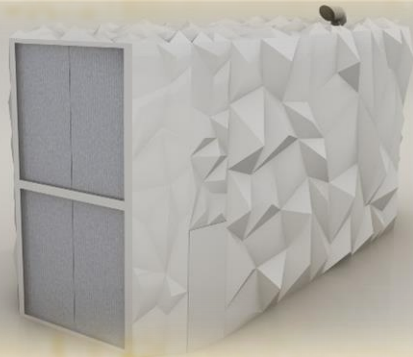


From 2 to 10 KWe

femto

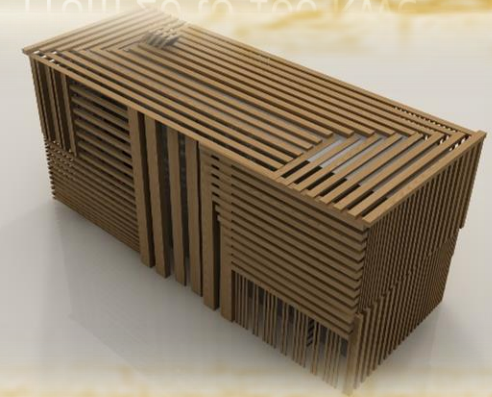
pico

From 20 to 100 KWe



nano

mega

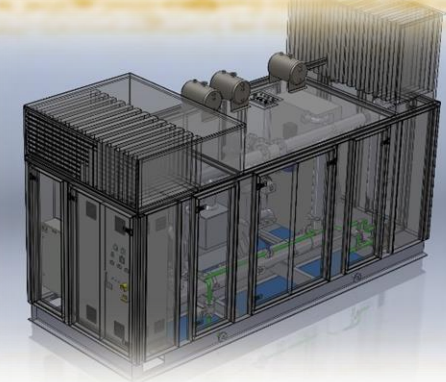


pentagen

from 120 to 200 KWe

From 2 to 100 KWe

From 240 to 360 KWe

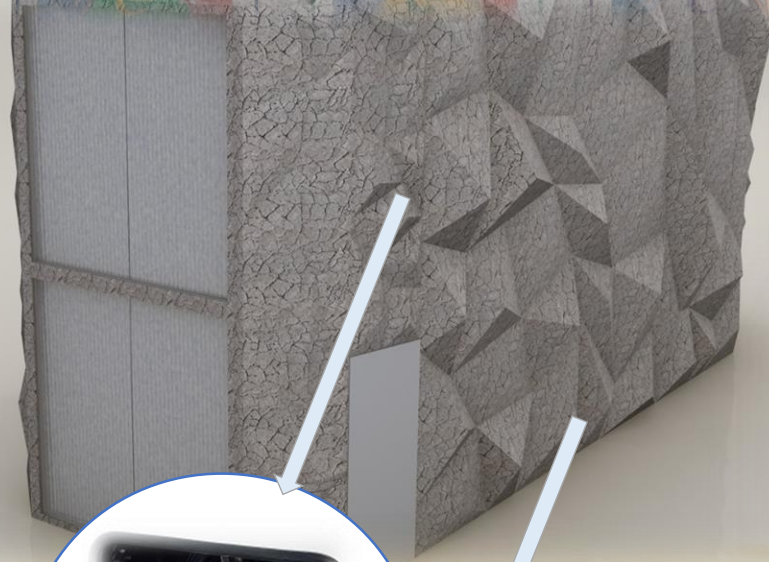




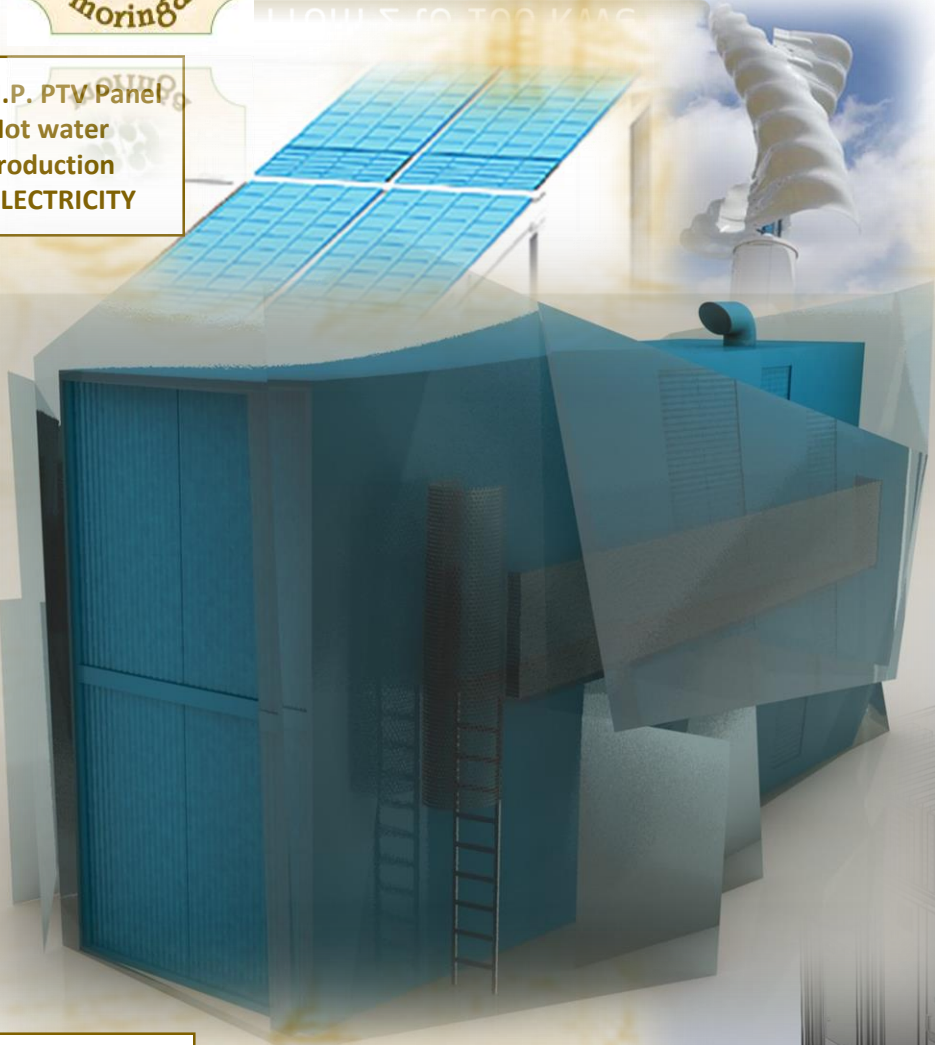
Pentagen

From 2 to 100 KWe

Products



C.H.H.P. PTV Panel
Hot water
production
& ELECTRICITY



C.H.H.P.
Combined heat
and power
System

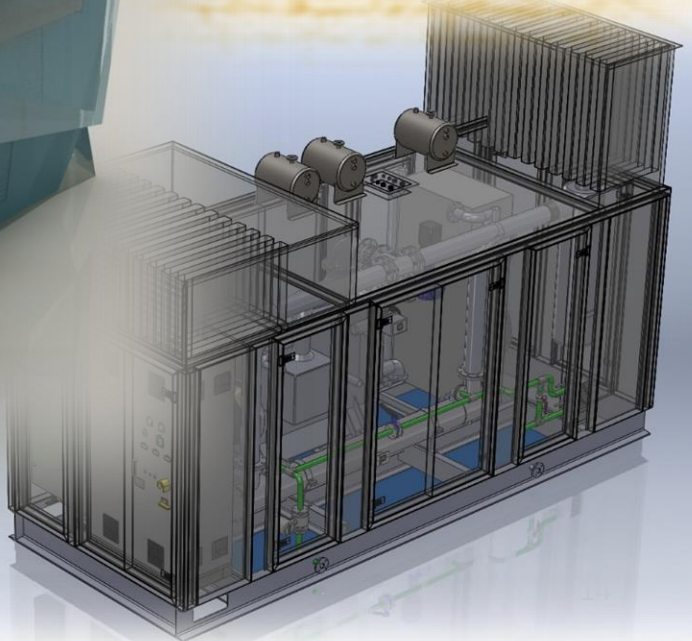
Vertical Wind
System



Remote super
vision Controller
(IPAD-IPHONE)



New Engine
generation



Hometeck

From 2 to 100 KWe

Products

Remote super
Vision Controller
(IPAD-IPHONE)



PTV Panel
Hot water
production

Hot Temperature
from Traditional
System

PTV Panel
Electric
Production

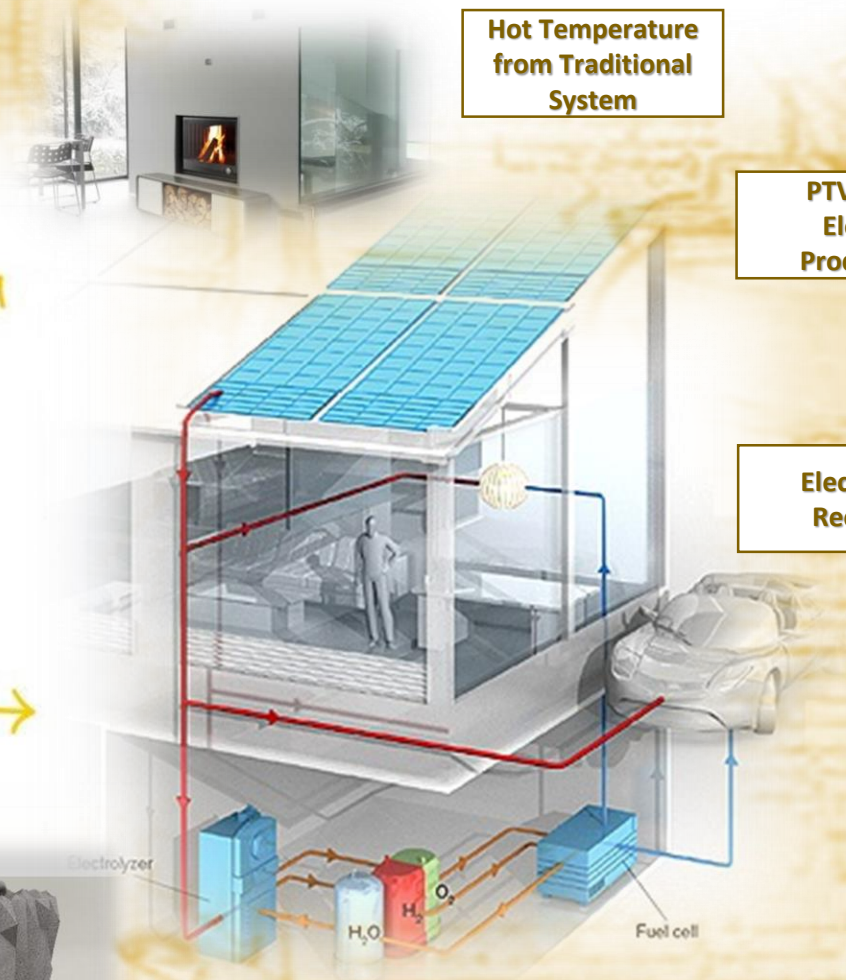
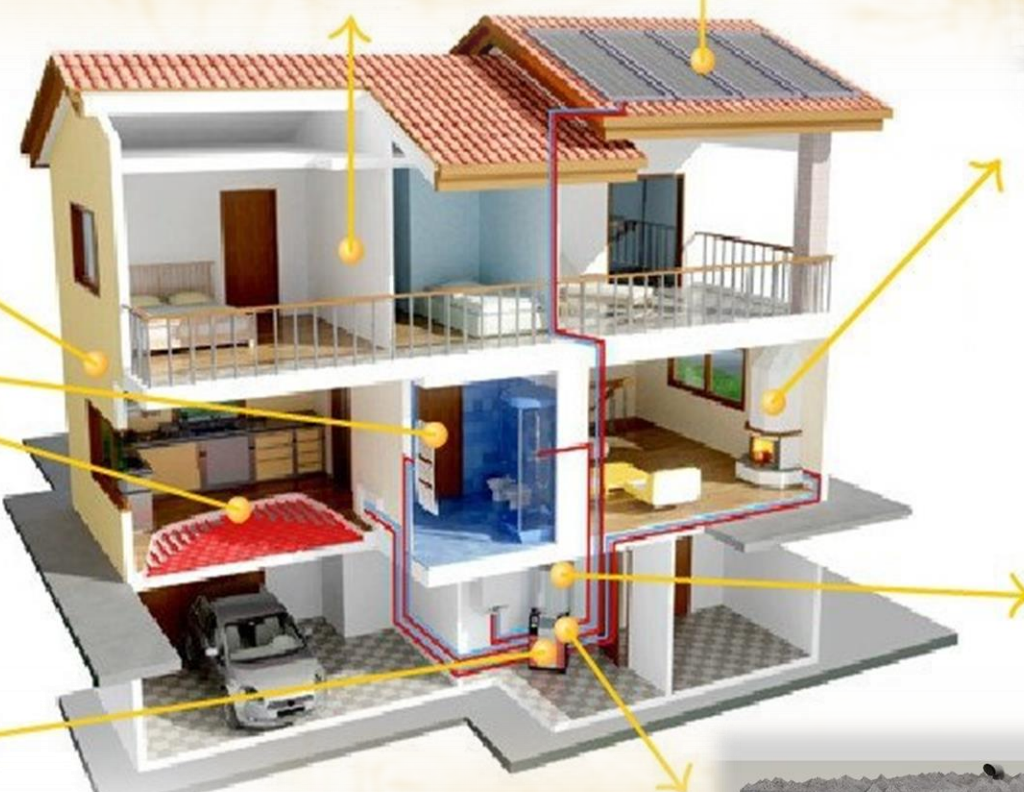
Electric Car
Recharge

Ambient
temperature
sensor

COLD Water
Temperature
System :
Air Conditioned

Hot water
Temperature
System

Natural Gas or
Renewable fuel
System



C.H.H.P.
Combined heat
and power
System

Fuel Cell Storage

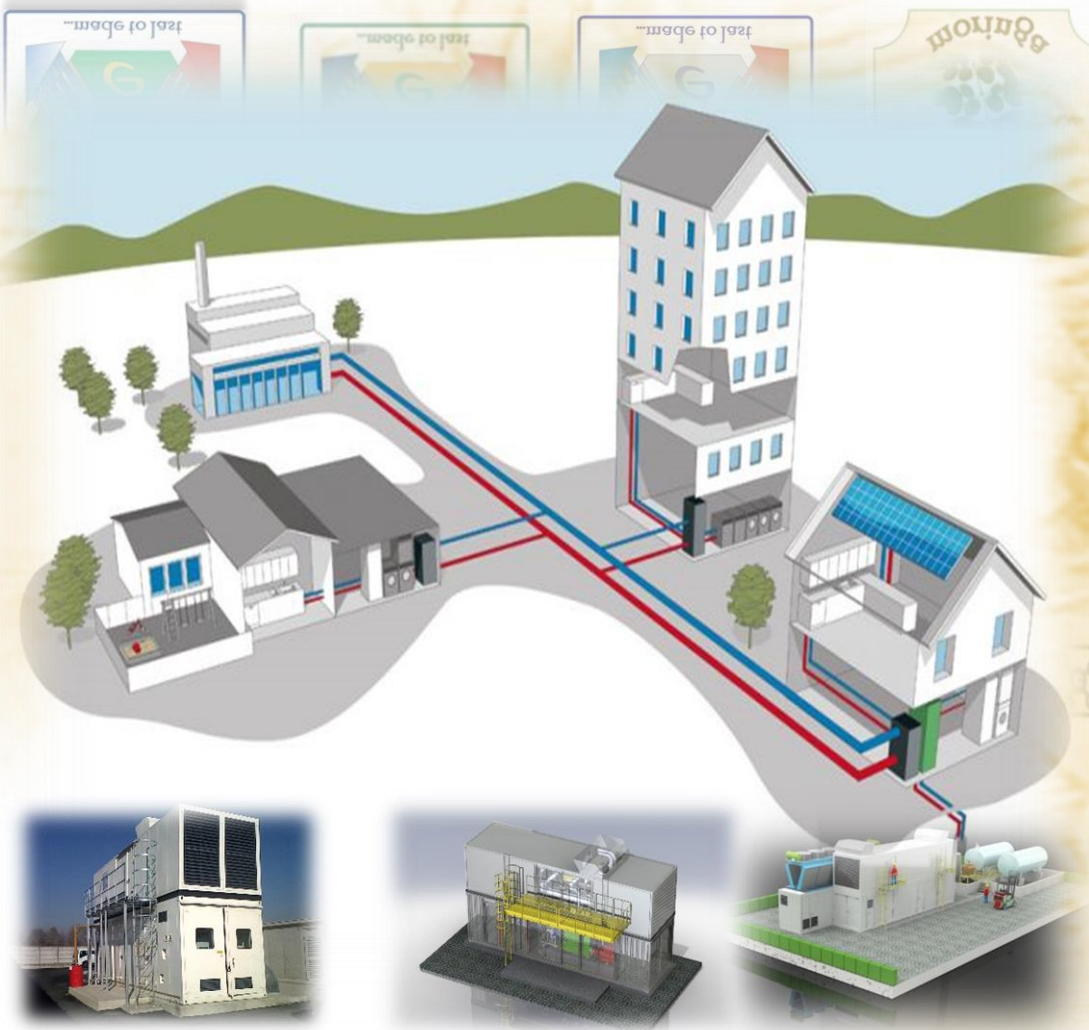




Villageteck

From 120 KWe to 4500 KWe

Products



-  Multifamily house
-  Singlefamily house
-  Office building
-  Commercial building
-  Refrigeration industry
-  High temp. industry
-  Biomass power plant
-  Solar + ORC plant



Clients Reference





Entalpica operate into domestic and international market by research and development, design, build, installation and erection and maintenance the combined heat and power plants system (cogeneration and trigeneration and pentageneration) to produce energy with innovative systems, fueled by traditional and renewable sources (natural gas, biogas and vegetable oils).

Main activity:

- ❖ C.H.P. with generating sets fueled by vegetable oil, power plant from 2 kWe to 3900 kWe and multipl,
- ❖ C.H.P. with generating sets fueled by natural Gas and biogas, power plant from 2 kWe to 4500 kWe,
- ❖ C.H.P with with gas turbines fueled by natural gas ,
- ❖ Power plant from 5000 kWe to 22000 kWe,
- ❖ *Full Service maintenance,*
- ❖ *SUPER FULL SERVICE : Vegetable Oil sale for its facilities Systems with the use of biogas: Alliances with producers of anaerobic digesters. ORC Turbines (Rankine cycle) for conversion of heat into electricity.*



entalpica spa

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South Africa

BUSINESS AWARD CATEGORIES & NOMINEES

INVESTOR OF THE YEAR AWARD

NOMINEES:
Enel Green Power SpA
NECO
FiatMilano SpA

PRIORITY SECTOR AWARD

NOMINEES:
Fera SpA-Ansaldo Energia SpA
Circ di Ravenna
Building Energy

BUSINESS PERSON OF THE YEAR AWARD

NOMINEES:
Mr. Fabio Albani
Mr. Andrea Garello Cantoni
Mr. Giacomo Rotunno

LIFETIME RECOGNITION AWARD

NOMINEES:
Mr. Ignazio Mancada
Ach. Anthony Victor Elia
Mr. Cosimo Bressia

CHAIRPERSON'S EXCELLENCE AWARD

NOMINEES:
Sasol Italy SpA
SAB Milan-Peroni
Investec Asset Management

SOCIAL RESPONSIBILITY AWARD

NOMINEES:
Fimaso SpA
Entalpica SpA
Bentini Cardiopatici nel Mondo

JURY

SAUL RODRIGUEZ MOLERO, CONSULEGGERIALE - CHAIRPERSON
TONY CIRIACO, PRESIDENT ITALIANI - JURY MEMBER
GIULIO MULLAS, DIRECTOR ICE JOHANNESBURG - JURY MEMBER
MARIANO MARANI, STUDIO BEM LAW - JURY MEMBER
MARCILLA LITTARO, MARKETING OFFICER - PROJECT MANAGER



Johannesburg



Regione dello Kwazulu Natal



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Brasil



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CNPJ: 19.669.455/00001-22

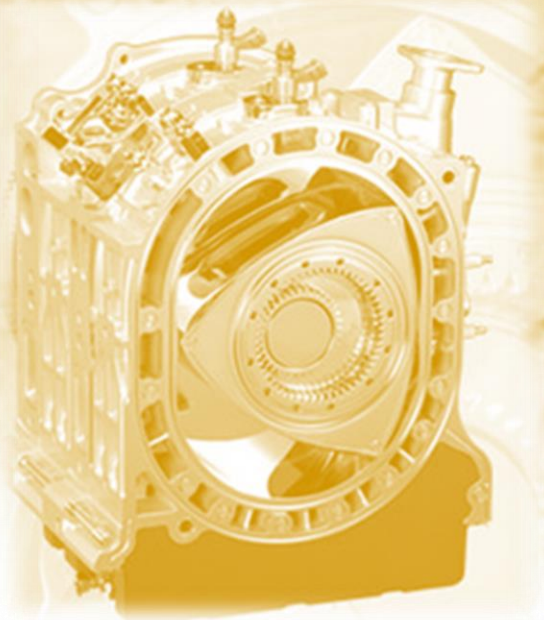
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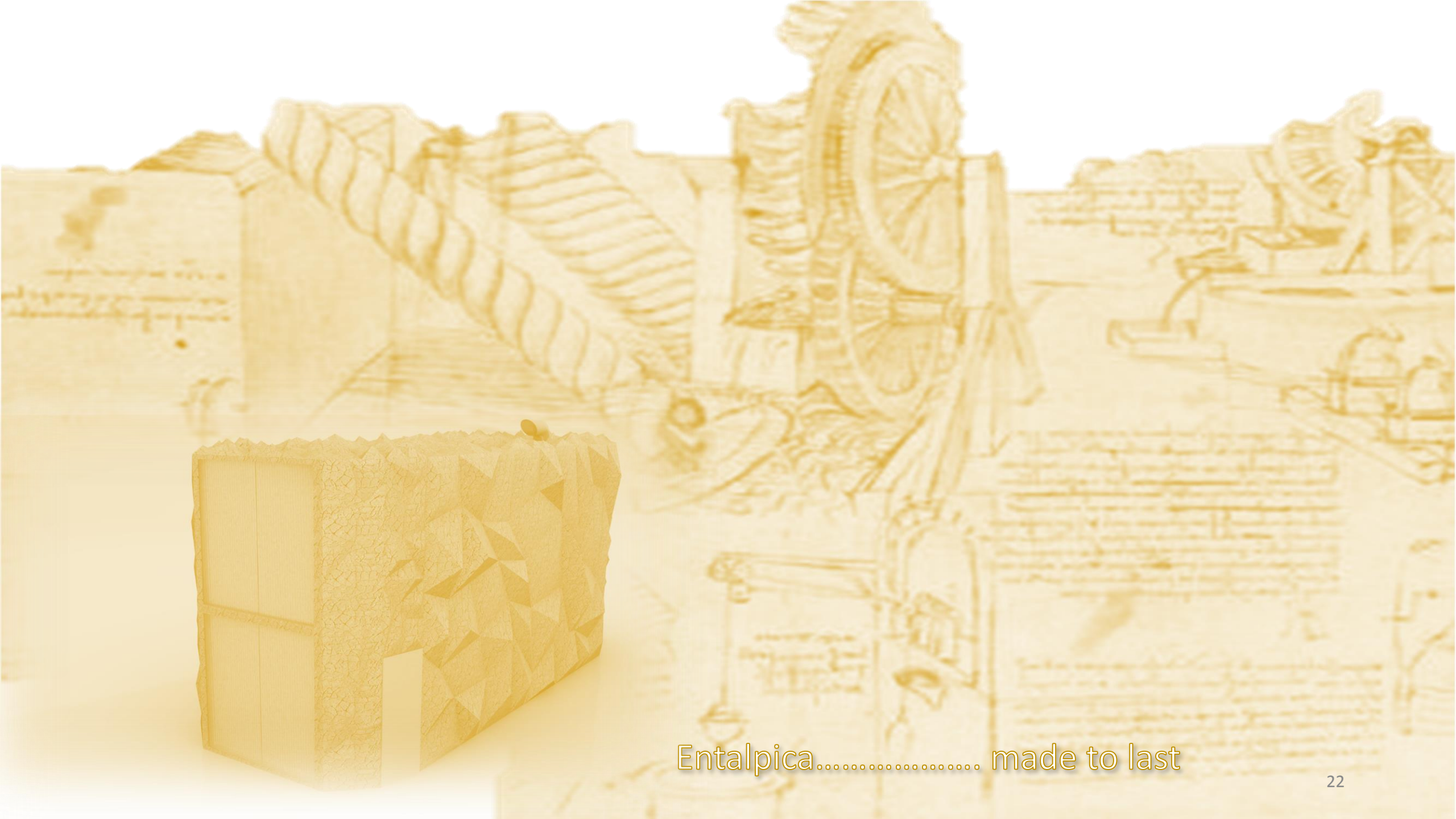


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2016



Entalpica..... made to last