

REGESS[®] ENERGY

PELLET BURNERS AND BOILERS



www.regessenergy.com

Why to choose REGESS® ENERGY?

As one of the few companies in the market, we have equipped our boilers and burners with the newest generation system consisting of intelligent monitoring of temperature in a building to ensure the most effective use of its power with high, simultaneous reduction of costs by **40%** in comparison with the standard costs of heating. High efficiency of up to **99%** and the use of materials of the highest quality allow our machines to work smoothly even in the hardest conditions.

The boilers and burners range in power from 10 kW to 285 kW and can be often fueled not only with pellets, but also with oat, chips or wood.



Thanks to our modern, environmental-friendly and very cost-efficient technology, we can heat the buildings of only a dozen up to several thousand square meters. We offer the products for house heating, multi-family buildings as well as large-surface, including industrial, sites.



ecology



energy efficiency



CO₂ neutral



easy to use



design

In the catalogue optional accessories for **MM Bio Luxury** and **Extreme IND Flow** boilers you can find a pneumatic fuel feeding device. **Vacuum System** (see Fig. 1, Fig. 3) is used wherever the room in which the boiler is situated is small in size and it is not possible to install a tank. This solution enables the supply of fuel from the reservoir to the boiler tank with the use of a reinforced flexible hose with the diameter of 50 mm, and the devices may be 25 meters apart from each other. The control of the Vacuum System placed over the reservoir of the pellet boiler (Fig. 2) is effected by pellet amount level sensors enabling or disabling the feed charge at the right time.

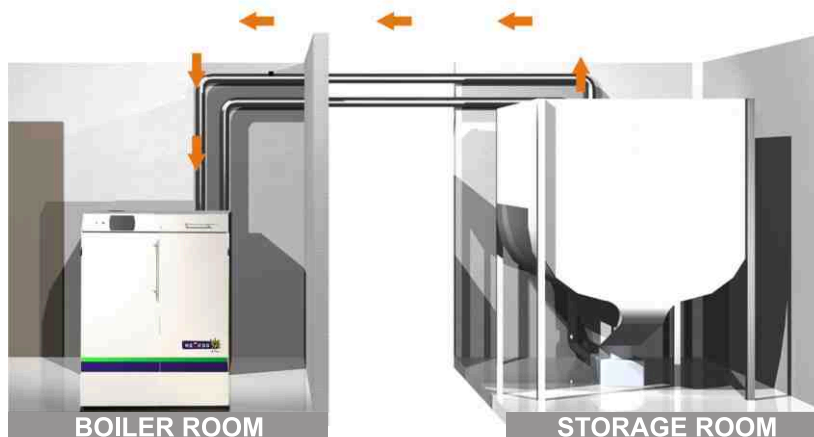


Fig. 1 Schematic operation of Vacuum System 1

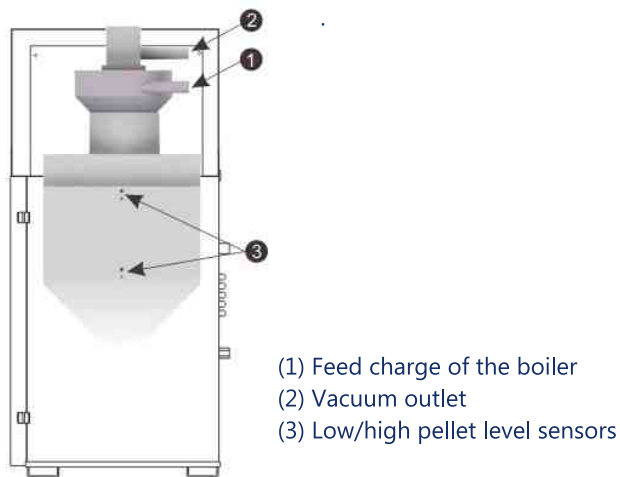


Fig. 2 Cross section of the boiler with pneumatic fuel feeding device

For large reservoirs, we additionally recommend equipping the Vacuum System in motoreductor with a 2.6 m worm feeder which helps to collect the fuel from a larger area (see Fig. 3).



Fig. 3 Vacuum System 2

Optional accessories:

- Cat. No 09-REG-VACUUM1 External feeding in Vacuum System 1
- Cat. No 09-REG-VACUUM2 External feeding in Vacuum System 2

! External feeding in case of any other boiler and burner in our offer is possible and is subject to individual arrangements.

✓ **MM Bio Luxury** is an extremely easy to operate and modern pellet boiler. Depending on the power of the unit, it is equipped with a tank with the capacity of 169 to 450 liters. Modern, intuitive operation, automatic lighting and power modulation (the range within 20 – 100%), the function of automatic cleaning of the heat exchanger and the efficiency of up to 95% are the most important advantages of MM Bio Luxury. The boiler is cheap and safe in maintenance and the combustion efficiency is optimized by the lambda probe. This is a combination of reliability, durability, efficiency and elegance.

Basic parameters:

TYPE	MMBL10	MMBL15	MMBL25	MMBL40	MMBL60
Building surface [m ²]	50-200	85-250	100-300	250-600	400-750
Minimal power [kW]	10	15	25	40	60
Depth [mm]	865	865	865	865	865
Width [mm]	1155-1460*	1155-1460*	1155-1460*	1155-1460*	1155-1460*
Height [mm]	1275-1360*	1275-1360*	1275-1360*	1375-1485*	1375-1485*
Container capacity [l]	169-320*	169-320*	169-320*	196-320*	223-450*
Chimney diameter [mm]	146	146	146	146	174
Weight [kg]	320-335*	320-335*	320-340*	375-400*	420-460*

*parameter with the option of an enlarged fuel tank



Cat. No. 03-REG-MMBL10	Pellet boiler MM Bio Luxury 10 kW
Cat. No. 03-REG-MMBL15	Pellet boiler MM Bio Luxury 15 kW
Cat. No. 03-REG-MMBL25	Pellet boiler MM Bio Luxury 25 kW
Cat. No. 03-REG-MMBL40	Pellet boiler MM Bio Luxury 40 kW
Cat. No. 03-REG-MMBL60	Pellet boiler MM Bio Luxury 60 kW

Optional accessories:

Cat. No 09-REG-VACUUM 1	Vacuum System 1
Cat. No 09-REG-VACUUM 2	Vacuum System 2
Cat. No 09-REG-VACON300	300 l Reservoir Vacuum System
Cat. No 09-REG-VACON700	700 l Reservoir Vacuum System
Cat. No 09-REG-MCON320	Additional reservoir 320 l
Cat. No 09-REG-MCON450	Additional reservoir 450 l

MM Bio Luxury:

Fuel:



pellet

Application:



Single-family house



Multi-family house



Small farm



Large farm



Industrial and commercial facilities



✓ **SM Bio** is the smallest boiler for pellets in our offer. Thanks to the modern modulation, operating this machine is limited to filling the container with pellets and the capacity of 230 l allows for filling with fuel every 3 to 14 days. Thanks to the designed automatics it meets the most stringent standards of environmental protection in the European Union. SM Bio is an optimal machine for installation in housing facilities of 50 to 300 m².

Handling of the machine is easy and intuitive. After filling the boiler with pellets and pressing the START button, the machine will fire up automatically and will select the operating parameters depending on the type of fuel in the container aiming at maintaining stable temperature in the rooms and of water. The first part of the exchanger has small overall dimensions thanks to the 3T design method (time, turbulator, temperature) and the high quality of thin boiler steel. The RGS Bio burner constitutes the second part; it combusts pellets and oat and is made from heat-resisting steel that resists the temperature of 1150 °C. Special regulation of the second generation selects combustion parameters for supplied fuel in a way that its consumption decreases by app. 20%. The controller allows for operating up 16 heating circuits, i.e. heaters and floor heating or hot water, is equipped with AUTOSTART function when voltage ceases, remembers the last settings, reminds of the forthcoming inspection, controls the temperature of the burner.

Basic parameters:

TYPE	SMB10	SMB20
Building surface [m ²]	50-200	100-300
Minimal power [kW]	10	20
Depth (incl. burner) [mm]	780 (1060)	865 (1140)
Width [mm]	650	752
Height [mm]	1700	1670
Container capacity [l]	230	240
Chimney diameter [mm]	135	160
Weight [kg]	220	280

Cat. No. 03-REG-SMB10 Pellet/oat boiler SM Bio 10 kW

Cat. No. 03-REG-SMB20 Pellet/oat boiler SM Bio 20 kW

Optional accessories:

Cat. No 09-REG-SBUFCON	Buffer control
Cat. No 09-REG-SCON3	Control of 3 additional mixing valves
Cat. No 09-REG-SGSM	GSM module
Cat. No 09-REG-SLAM	Lambda probe

SM Bio:

Fuel:



pellet



pellet/oat

Application:



Passive house



Single-family house



Multi-family house



Small farm



✓ **SM Bio Luxury** is an extended version of the successful SM Bio model. Covering of the machine and burner with ceramics has reduced emissions and increased the efficiency of the machine. SM Bio Luxury is an optimal product destined for installation in houses of 50 to 300 m². The incorporated exhaust gas turbulators hold even more energy in the boiler and together with the ceramic insert, which heats up to 1000 °C, they generate excellent combustion of biomass. Each of the SMBL model has been equipped with a switching station that facilitates installation of additional devices in a boiler room. Weather control that regulates 4-patent heating circuits and broad-band lambda probe permits smooth regulation depending on the needs of individual floors. In addition, each boiler can be expanded with a buffer container or a solar system and 200 l of pellets, which it is capable of storing, allowing us to forget about frequent visits to a boiler room. Automatic start of the burner, control over flame with a photocell, low thermal inertia at starting and stopping – these are only some of the advantages of this small and very efficient boiler.

Basic parameters:

TYPE	SMBL10	SMBL20
Building surface [m ²]	50-200	100-300
Minimal power [kW]	10	20
Depth (incl. burner) [mm]	780 (1060)	865 (1140)
Width [mm]	650	752
Height [mm]	1700	1670
Container capacity [l]	230	240
Chimney diameter [mm]	135	160
Weight [kg]	220	280

Cat. No. 03-REG-SMBL10 Pellet/oat boiler SM Bio Luxury 10 kW

Cat. No. 03-REG-SMBL20 Pellet/oat boiler SM Bio Luxury 20 kW

Optional accessories:

Cat. No 09-REG-SBUFCON	Buffer control
Cat. No 09-REG-SCON3	Control of 3 additional mixing valves
Cat. No 09-REG-SGSM	GSM module

SM Bio Luxury:

Fuel:



pellet



pellet/oat

Application:



Passive house



Single-family house



Multi-family house



Small farm



✓ **Multifuel Bio** is a small furnace. The controller, which Multifuel Bio has been equipped with, controls not only the boiler but also the system of central heating or of hot water. The 208 l container allows for rare visits to the boiler room. The ceramic chamber elevates the temperature during after-burning to over 900 °C, which, with overfire air, after-burns non-combusted gases, thus increasing the efficiency of the machine. The self-cleansing charge burner of the boiler has been equipped with the modern modulation of the second generation. Controlling up to 16 heating circuits, AUTOSTART function after voltage cessation, self-cleansing grate, possibility for oat combustion, 3 phases of firing up that eliminate gas explosion, control over flame with a photocell – these are only some of the advantages of this machine.

Basic parameters:

TYPE	MFB10	MFB16	MFB24
Building surface [m ²]	50-200	85-250	100-300
Minimal power [kW]	10	16	24
Depth [mm]	790	790	790
Width [mm]	1022	1175	1277
Height [mm]	1370	1370	1370
Container capacity [l]	208	208	208
Chimney diameter [mm]	135	160	160

Cat. No. 03-REG-MFB10	Pellet/oat/wood boiler Multifuel Bio 10 kW
Cat. No. 03-REG-MFB16	Pellet/oat/wood boiler Multifuel Bio 16 KW
Cat. No. 03-REG-MFB24	Pellet/oat/wood boiler Multifuel Bio 24 kW

Optional accessories:

Cat. No 09-REG-BBUFCON	Buffer control
Cat. No 09-REG-BCON3	Control of 3 additional mixing valves
Cat. No 09-REG-BGSM	GSM module
Cat. No 09-REG-BLAM	Lambda probe

Multifuel Bio:

Fuel:

 pellet
  pellet/oat
  wood

Application:

 Passive house
  Single-family house
  Multi-family house
  Small farm



✓ **Multifuel Bio Luxury** does not differ in dimensions and basic functions from the Multifuel Bio model. It's added advantage is the broad-band 6-lead lambda probe, which economizes up to 20% of fuel. The self-cleansing charge burner of the boiler has been equipped with the modern modulation of the second generation. Controlling up to 16 heating circuits, AUTOSTART function after voltage cessation, self-cleansing grate, possibility for oat combustion, 3 phases of firing up that eliminate gas explosion, control over flame with a photocell – these are only some of the advantages of this machine. While constructing Multifuel Bio Luxury, we aimed for: low price and low fuel consumption, small overall dimensions and possibility for combusting granulated biomass and wood.

Basic parameters:

TYPE	MFBL10	MFBL16	MFBL24
Building surface [m ²]	50-200	85-250	100-300
Minimal power [kW]	10	16	24
Depth (incl. burner) [mm]	790	790	790
Width [mm]	1022	1175	1277
Height [mm]	1370	1370	1370
Container capacity [l]	208	208	208
Chimney diameter [mm]	135	160	160

Cat. No. 03-REG-MFBL10	Pellet/oat/wood boiler Multifuel Bio Luxury 10 kW
Cat. No. 03-REG-MFBL16	Pellet/oat/wood boiler Multifuel Bio Luxury 16 KW
Cat. No. 03-REG-MFBL24	Pellet/oat/wood boiler Multifuel Bio Luxury 24 kW

Optional accessories:

Cat. No 09-REG-BBUFCON	Buffer control
Cat. No 09-REG-BCON3	Control of 3 additional mixing valves
Cat. No 09-REG-BGSM	GSM module

Multifuel Bio Luxury:

Fuel:

 pellet
  pellet/oat
  wood

Application:

 Passive house
  Single-family house
  Multi-family house
  Small farm

✓ **Extreme IND Flow** with automatic feeding of solid fuels, is a boiler which heats the rooms by distributing hot air. This device has no water jacket, it is equipped with a pressure vent device in front, has also 2 separate channels for the distribution of air in the spiro type pipes. This model must be connected to a chimney in order to exhaust fumes. The blast ventilation unit has the capacity of up to 9300 m³/h. Extreme IND Flow is ideally suited for heating places like: manufacturing facilities, car garages, paint shops, craft shops, sports facilities, small exhibition halls and commercial buildings.

Basic parameters:

TYPE	EXIF25	EXIF40	EXIF60	EXIF100
Building surface [m2]	up to 180	up to 250	up to 400	up to 700
Minimal power [kW]	25	40	60	100
Depth [mm]	890	996	1063	1196
Width [mm]	1168	1200	1251	1648
Height [mm]	1226	1440	1745	1965
Container capacity [l]	170	170	170	300
Blower efficiency [m3/h]	3100	4800	6200	9300
Weight [kg]	272	410	440	740



Optional accessories:

Cat. No 09-REG-VACUUM 1	Vacuum System 1
Cat. No 09-REG-VACUUM 2	Vacuum System 2
Cat. No 09-REG-VACON300	300 l Reservoir Vacuum System
Cat. No 09-REG-VACON700	700 l Reservoir Vacuum System

Cat. No. 03-REG-EXIF25	Blast boiler for pellet/eco-pea coal/coal dust Extreme IND Flow 25 kW
Cat. No. 03-REG-EXIF40	Blast boiler for pellet/eco-pea coal/coal dust Extreme IND Flow 40 kW
Cat. No. 03-REG-EXIF60	Blast boiler for pellet/eco-pea coal/coal dust Extreme IND Flow 60 kW
Cat. No. 03-REG-EXIF100	Blast boiler for pellet/eco-pea coal/coal dust Extreme IND Flow 100 kW

Extreme IND Flow

Fuel:



pellet eco-pea coal coal dust

Application:



Single-family house



Industrial and commercial facilities



✓ **King Size IND Bio** is the biggest boiler in our range. Its task is to meet the most difficult demands in large-surface buildings such as schools, playgrounds, sport halls etc. Knowing the needs and duties of administrators of heated facilities, we have adapted our machine for the hardest conditions, regardless of daytime or weather. We have put a lot of effort to make the boiler maintenance-free and operating regardless of fuel type. The assumption that we undertook during designing works were: availability of fuel at hand, CO₂ neutrality, low consumption of electric energy, possibility for operating with an additional fuel container. Moreover, the broadband lambda probe reduces the demand for fuel by 20%. King Size IND Bio is, as the only one, equipped with a control cabinet that, thanks to a large alpha-numeric display screen, facilitates an extremely easy operation. The counter-flow heat exchanger, excellent insulation to reduce heat losses into the environment (there is an 85 - 110 mm layer of glass wool between the body and the casing and there's an insulation made of glass fibres between the front door), self-cleansing burner equipped with a worm that pushes ash out off the grate, and 305 l container with a possibility to expand it to 1386 l, guarantee long-standing and nearly maintenance-free operation of the boiler.

Basic parameters:

TYPE	KSIB50	KSIB75	KSIB100	KSIB150	KSIB200	KSIB285
Building surface [m ²]	300-750	400-900	600-1300	1000-1800	1100-2600	1400-3750
Power range [kW]	15-50	23-75	30-100	45-150	60-200	86-285
Depth [mm]	957	1170	1430	1495	1560	1755
Depth (incl. burner) [mm]	1564	1945	2205	2435	2495	2503
Width [mm]	740	830	830	870	910	910
Height [mm]	948	1115	1115	1215	1385	1385
Weight [kg]	356	482	559	694	889	979
Container capacity [l]	305	305	305	305	305	305



Cat. No. 03-REG-KSIB50	Pellet boiler King Size IND Bio 50 kW
Cat. No. 03-REG-KSIB75	Pellet boiler King Size IND Bio 75 kW
Cat. No. 03-REG-KSIB100	Pellet boiler King Size IND Bio 100 kW
Cat. No. 03-REG-KSIB150	Pellet boiler King Size IND Bio 150 kW
Cat. No. 03-REG-KSIB200	Pellet boiler King Size IND Bio 200 kW
Cat. No. 03-REG-KSIB285	Pellet boiler King Size IND Bio 285 kW

Optional accessories:

Cat. No 09-REG-KBUFCON	Buffer control
Cat. No 09-REG-KGSM	GSM module
Cat. No 09-REG-KCON285	Additional reservoir 285 l
Cat. No 09-REG-KCON305	Additional reservoir 305 l
Cat. No 09-REG-KCON485	Additional reservoir 485 l
Cat. No 09-REG-KCON1386	Additional reservoir 1386 l

King Size IND Bio:

Fuel:



pellet

Application:



Multi-family house




Small farm



Large farm



Industrial and commercial facilities

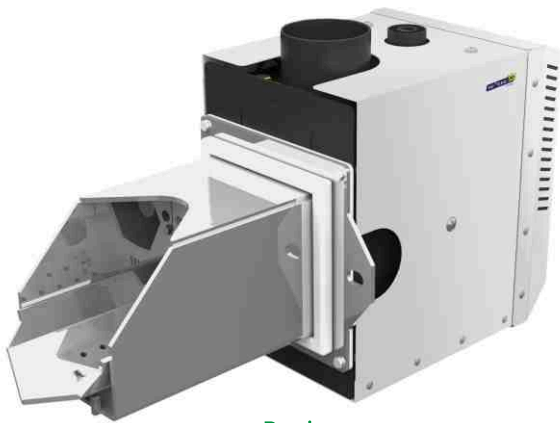
 We designed **RGS Bio** and **IND RGS Bio** burners with the modernization of oil- or coal-fired boilers in mind. Our solution – replacement of the burner itself – allows for the use of eco fuel without having to incur costs of replacing the entire stove.

Thus improved boiler room may be additionally equipped with a tank for storing pellet.

We offer tanks with the capacities ranging from 305 to 485 l, selected depending on the burner power.



Option: pellet tank with the capacity of 305 l



✓ **Burner RGS Bio** is a burner in which controlling has been maximally simplified to provide users with the maximum comfort. Our range includes the following models: BRB16 kW, BRB24 kW and BRB32 kW, of which each is efficient at 96%. To protect the environment, we have equipped the burner with the modern function of the second generation that precisely adjusts power to the demands of a given building. The broadband lambda probe can economize fuel by up to 40%. The advantages worth mentioning include: the control over flame with a photocell, possibility to operate up to 16 heating circuits (heaters and floor heating or hot water), 3 phases of firing up that eliminate gas explosion at starting, AUTOSTART function after voltage cessation, and separation of air into primary and secondary that reduces the level of exhaust gas emissions to the minimum with maintaining the efficiency of the machine at >94.5%.

Basic parameters:

TYPE	BRB16	BRB24	BRB32
Heating surface [m2]	50-200	100-300	150-400
Power range [kW]	4,8-16	7,2-24	9,6-32
Mean power input [W]	30	35	40
Length of loader [m]	1,6	1,6	1,6
CO emissivity [ppm]	<200	<200	<200
Container capacity [l]	305	305	305
Dimensions of container (width x depth x length) [mm]	600x600x1300	600x600x1300	600x600x1300

Cat. No. 03-REG-BRB16	Pellet Burner RGS Bio 10 kW
Cat. No. 03-REG-BRB24	Pellet Burner RGS Bio 24 kW
Cat. No. 03-REG-BRB32	Pellet Burner RGS Bio 32 kW

Optional accessories:

Cat. No 09-REG-PCON305	Basic reservoir 305 l
Cat. No 09-REG-PCON485	Reservoir 485 l
Cat. No 09-REG-PBUFCON	Buffer control
Cat. No 09-REG-PCON3	Control of 3 additional mixing valves
Cat. No 09-REG-PGSM	GSM module

Burner RGS Bio:

Fuel:



pellet

Application:



Passive house



Single-family house



Multi-family house



Small farm



Large farm

Our burners and boilers are offered with a modern **GSM communication** module. This multifunctional device allows to communicate with drivers through SMS. With the help of a mobile phone you can monitor the operation of the burner or boiler and make changes to its settings from any place. In addition, the configuration panel makes it possible to be notified by SMS of significant changes to the operation of sensors.

! You will need a SIM card, that can be purchased from any mobile phone operator, to make a GSM call.



Option: remote monitoring and control through a GSM module



✓ **Burner IND RGS Bio** is, most of all, a burner that was designed with a target set at modernizing a boiler room for heating oil. In our range we offer models BIRB 50 kW, BIRB 100 kW, BIRB 150 kW, and BIRB 200 kW which are equipped with the modern function of the second generation and the broad-band lambda probe and thus may save even up to 40% of fuel. Low consumption of electric energy thanks to a photocell that traces the flame, possibility for controlling several heating circuits, solar system and buffer container – these are only some of the advantages of this small machine. Savings that can be achieved with our burner amount to 50% in relation to heating oil and 60% in relation to liquid gas. The efficiency of the machine reaches 99%. Secondary air diffuser, automatic firing up and cleansing, flame detector and automatics that are fully compatible with oil and gas boilers make this model sufficient even for the most demanding clients.

Basic parameters:

TYPE	BIRB50	BIRB100	BIRB150	BIRB200
Heating surface [m ²]	370-660	600-1300	700-2000	1100-2600
Power range [kW]	15-50	30-100	45-150	60-200
Mean power input [W]	100	150	230	230
Length of loader [m]	1,6	1,6	1,6	1,6
CO emissivity [ppm]	<200	<200	<200	<200
Container capacity [l]	305	305	305	305
Dimensions of container (width x depth x length) [mm]	600x600x1300	600x600x1300	600x600x1300	600x600x1300


Cat. No. 03-REG-BIRB50	Pellet Burner IND RGS Bio 50 kW
Cat. No. 03-REG-BIRB100	Pellet Burner IND RGS Bio 100 kW
Cat. No. 03-REG-BIRB150	Pellet Burner IND RGS Bio 150 kW
Cat. No. 03-REG-BIRB200	Pellet Burner IND RGS Bio 200 kW

Optional accessories:

Cat. No 09-REG-PCON305	Basic reservoir 305 l
Cat. No 09-REG-PCON485	Reservoir 485 l
Cat. No 09-REG-PBUFCON	Buffer control
Cat. No 09-REG-PCON3	Control of 3 additional mixing valves
Cat. No 09-REG-PGSM	GSM module


Burner IND RGS Bio:


Fuel:





pellet


Application:



Passive house


Single-family house


Multi-family house


Small farm


Large farm


Industrial and commercial facilities

NOW PELLET IN OUR OFFER – HIGHEST QUALITY **DIN ++**

Pellet manufacturing process consists of appropriate grinding, drying and compressing of the biomass into granules. Depending on materials used in production the quality of the pellet can vary a lot. Our biomass is characterized by excellent quality parameters. It is manufactured exclusively from natural raw materials: sawdust, wood shavings and wood chips and does not contain commonly used additives in the form of PVC or painted wood scraps which are harmful when burnt and give off an unpleasant odor and leave a lot of ash.

Facts:

- ✓ pellet is eco-friendly and efficient fuel, neutral in terms of CO₂ emissions
- ✓ 1 ton of fuel leaves only 2 kg of ash
- ✓ 1 liter of fuel oil can be replaced with 2 kg of pellet
- ✓ wood in the amount of 2 m³ = 1 ton of pellet
- ✓ to heat one family house it takes about 5-8 tons/ heating season of pellet



Cat. No. 08-REG-P15 Wood pellets 15 kg bags

Where to find us?

The **REGESS® ENERGY** products are being sold in Europe,
Asia, Latin and Central America and Africa.



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HEAT PUMPS
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PHOTOVOLTAICS

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