

Low-cost projects in the energy sector, for oil-fired boilers of any design - quick installation, long work, own maintenance. An example is the triple efficiency of the TRGA fuel homogenizer, with a [new tax](#) from the IMF.

Quote - "The International Monetary Fund (IMF) was in favor of the idea to introduce a tax on carbon dioxide emissions. This is stated in the IMF report, dated May 3, 2019. "In order to realize the goals of the Paris Climate Agreement, carbon dioxide emissions by 2030 need to be reduced by one third, and a charge of \$ 70 per ton of carbon dioxide emissions will be introduced," explained the head of the IMF, Christine Lagarde, and director of fiscal policy organization Vitor Gaspar. "



What gives the installation of fuel homogenizer TRGA on all boilers, which use heavy fuel oil (mazut)? (alcohol, sugar, brick, glass, metallurgical, mining and processing plants, cardboard factories, power plants, etc.)

1. **Effect 1 - net fuel economy**, due to improved combustion.

- minimum (on pure quality fuel oil) = **2.44%**.
- academically proven maximum (on pure quality fuel oil) = **4.1%**.
- non-academic tests (emulsion burning water / fuel oil) = **8%**.
- on poor quality fuel - more fuel savings.

In view of increasing the efficiency of boilers with their size and new technologies = **3%**.

2. **Effect 2 - reduction of harmful** emissions.

2.1. **Transformation of sediments and condensate water into fuel** (0.5-5%) grinding clots and mechanical impurities to burn them completely in the boiler (1-1.5%), no costs for cleaning tanks and sludge disposal (equivalent to 0.3% of fuel volume)

Take this figure equal to **1%** of the total fuel.

Total net fuel savings of at least 4% of the total fuel.

2.2. Reduced emissions into the atmosphere.

1 ton of HFO releases approximately 3.07 tons of CO₂.

(calculation of NO_x emissions WITH, SO₂ will be later).

3. Effect 3 - lowering operating costs.

These are the costs of cleaning filters, nozzles, heat exchangers (the frequency of cleaning increases about 2 times), the cost of a new boiler lining, repair of pumps and replacement of heat exchangers due to sulfate corrosion. This figure is individual, therefore, in this text is not evaluated.

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Example 1 - a sugar mill boiler that burns 2 tons of HFO per hour.

HFO burned = 2 tons / hour * 24 hours * 30 days * 10 months = **14,400 tons p/ year.**

Net fuel economy will be (4%) = 576 tons per year or \$170,000.00

The savings with the new tax will be 576 tons * 3.07 * \$70 = \$123,782.00

Economic effect total = \$293,782.00

Example 2 - one boiler on mining factory in the aluminum industry,
which burns 8 tons HFO p/h or **57,600 tons per year.**

Net fuel economy will be (4%) = 2,304 tons per year or \$680,000.00

The savings with the new tax will be 2,304 tons * 3.07 * \$70 = \$495,129.00

Economic effect total = \$1 175,129.00

Example 3 - one unit at a large power station,

which burns 20 tons of fuel oil p/h. or **144 000 tons per year.**

Net fuel savings will be (4%) = \$ 1,700,000.00

The savings on the new tax will be = \$ 1,230,782.00

Economic effect total = \$2 930 782.00

Details about emissions here.

<https://www.linkedin.com/pulse/fuel-economy-reduced-emissions-andrew-ruban/>

Presentation for medium and large boilers here.

<http://www.energy-saving-technology.com/documentation/trga%20heater%20en%20mail.pdf>

<http://www.energy-saving-technology.com/documentation/trga%20heater%20ru%20mail.pdf>

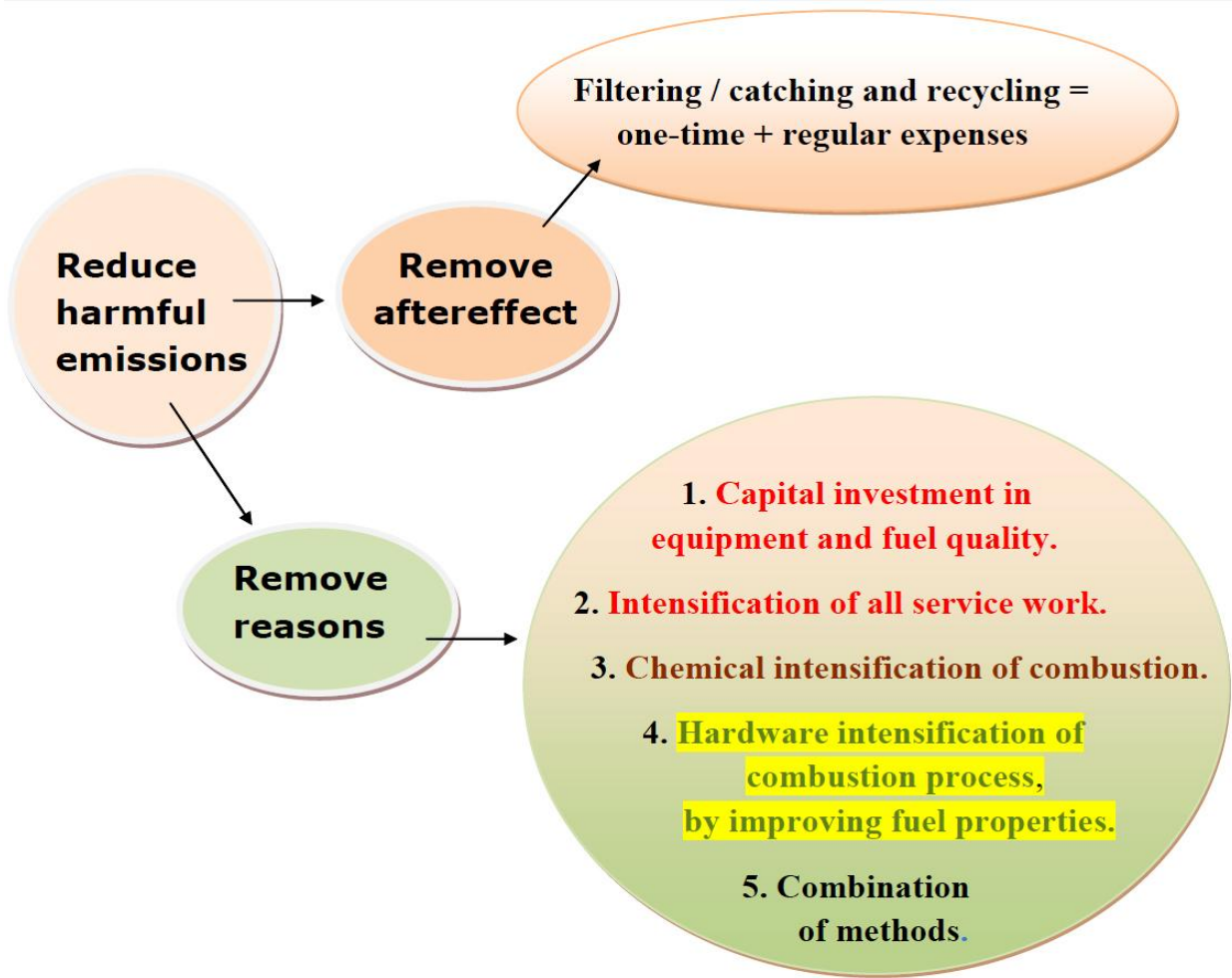
Presentation for small boilers here.

<http://www.energy-saving-technology.com/documentation/small%20boiler/small%20boiler%20eco%20en.pdf>

<http://www.energy-saving-technology.com/documentation/small%20boiler/small%20boiler%20eco%20ru.pdf>

What do we offer ?

We offer - **to eliminate the causes** of harmful emissions and excessive fuel consumption, but does not deal with their consequences.



How does it look? [One example here.](#)



And it works for [ship engines.](#)