

# Energy Efficiency: Armenia

## New greenhouse (p. 1)

### Energy efficient greenhouse saves power and money

High energy consumption is a burden for the majority of greenhouse owners in Armenia. To avoid the issue with high energy costs, "Alternative Energy" LLC decided to invest into a new, state-of-the-art greenhouse.

Utilizing international best practices, a greenhouse with energy saving screens, energy efficient boilers and an automated control system for the whole operation cycle was built. Within 6 months, the construction was completed. The invested sum amounted to 2.3 million USD.

Since December 2013, the greenhouse with an area of 4.5 ha produces annually 4,500 t of fresh tomatoes and cucumbers, for the benefit of consumers in Armenia and abroad.



**Benefits: 60% less energy consumption for Alternative Energy LLC thanks to the new greenhouse. Financially, this amounts to a saving of over 400,000 USD per year for the company.**



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# Energy Efficiency: Armenia

## New greenhouse (p. 2)

### Energy efficient greenhouse

#### Main Investment

New gas boiler, energy saving screens, automation system

#### Size of Investment

2,300,000 USD

#### Date of Implementation

12/2013

#### Operational Results

Total Natural Gas Savings: 17,389 MWh/y

- Measure 1 (gas boiler): 7,155 MWh/y
- Measure 2 (energy saving screens): 10,234 MWh/y

#### Investment Profitability

- Annual savings of 404,000 USD
- Payback period of 6 years
- IRR 11.7%

**17,389 MWh or 60% of energy saved p.a.**



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