

WHY SEA energy-consulting?

» BECAUSE of limited fossil fuels, heating-costs are continually rising.

An energy optimization plan is an easy and responsible way to save money and will add value to your home.

Over a 30 year period, insufficient insulation can create heating expenses greater than the cost of constructing the entire building.

An optimized insulation system will reduce these costs and create a high level of comfort and peace of mind.

The ideal combination of geometry/design of the building, thermal insulation and heating systems protect you from ever increasing energy costs.

Independent calculations identify the combination of measures which make the best economic sense for you.

It just makes sense. Investing in your own inflation-proof energy supply will protect you now and in the future and will keep you comfy.

KONTAKT



» FREDRIK VON DER LANCKEN
Dipl. Ing.

fon: +351 962 647 016

fon: +49 (0)1520 36 40 178

mail: info@solar-energy-advise.com

web: www.solar-energy-advise.com

SAVE!

up to 95% of your heating costs.



» SEA energy consulting will determine how best to conserve energy and whether it makes economic sense for you.

THREE REASONS for choosing **SEA consulting:**

» EXPERTISE

- Energy consultant, educated and licensed in Germany
- Lecturer in the education of energy consultants in Hannover (Germany)
- University degree with a focus on energy efficiency and environmentally-friendly technology
- Many years of experience in Portugal and Germany
- Languages spoken: English, German, Portuguese

» INDEPENDENCE

- There is no hard sell, just clear advice
- Independent recommendations with no ties to any particular brand
- Neutral analysis of quotes

» INDIVIDUAL

- SEA consulting is tailored to your specific needs, wishes and future possibilities



THREE FUNDAMENTAL steps to energy-independence include:

» CALCULATING*

- Energy demands and heating costs
- The development of heating expenses over a 30 year period
- The maximum required heat power and optimum heating system design
- CO₂ emission reduction
- The building structure's condensation-point and surface temperatures
- Building geometry optimization

» OPTIMIZING

- The most economic combination of insulation and heating technology
- Potential future costs with options for limitation
- Speed of realizing the return on your investment.
- Energy and CO₂ savings

» HEATING TECHNOLOGY

- SEA designs integrated heating systems with combinations of solar, wood or gas burner, electric heating or heat-pumps.
- Calculation of the time taken to realize the savings of your new heating system

*of an existing or planned building

HERE'S A CASE STUDY of how a combination of insulation and a new heating system resulted in significant cost savings:

» EXISTING

- old clay house, 90m²
- 50cm clay walls without insulation
- aluminum sliding windows
- single glaze
- heat costs: 1500€/year
- energy demand: 150 kWh/m² per year
- CO₂ emission: 4.5 to per year

» AFTER RENOVATION

- optimum insulation of walls, roof and floor
- triple-glazed windows
- wall and floor heating
- 14m² solar-panels with 1600ltr storage
- Pellet-burner with heat exchanger

» THE RESULTS

- The total cost for space heating and warm water for 1 year – an incredible 12€
- return on investment: 8 years (assuming 10% price rise per year)
- ideal comfort
- This house exists - the results are real!