

SUSTAINABLE ENVIRONMENTAL DESIGN

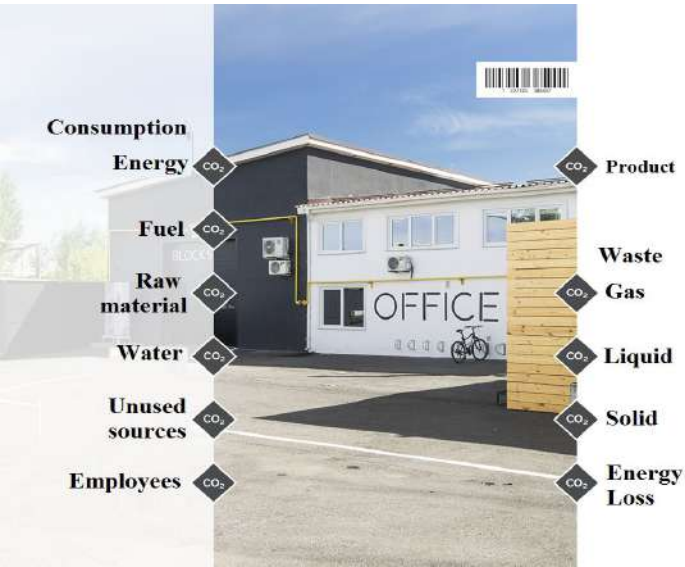


grass

лаборатория
экоустойчивого
дизайна

Service #1.

Company's assets green audit



Result:

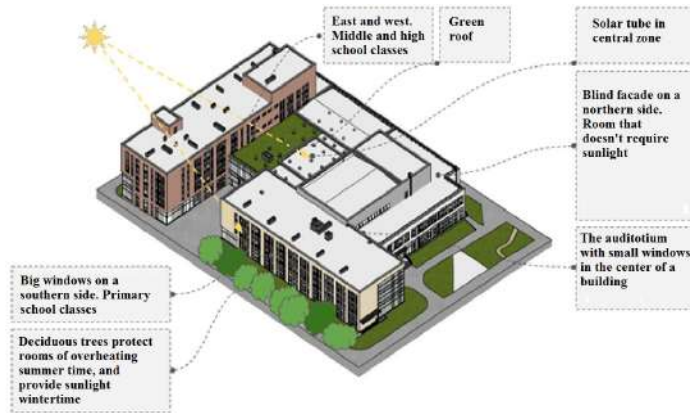
- Research and analysis of existing buildings, technological and business processes of the company
- Drawing up a model of energy and resource
- Carbon footprint calculations in technological and logistics chains
- Optimization of the model according to economic and environmental indicators
- List of measures for the renovation of buildings, technological and business processes of companies.

For what?

- Green audit helps company:
- To make their activity more sustainable;
- Reduce real estate maintenance costs
- Optimize carbon footprint of supply chain
- Attract new customers with green demands
- Discover new markets

Service # 2.

Green low-carbon conceptions for building projects



Result:

- Analysis of the design context
- Conceptual architectural solution
- Calculation and minimization of the carbon footprint during the operation of building
- Cyclic design solutions
- Solution for user's health
- Solutions for reducing the cost of building maintenance
- List of requirements for construction documents

For what?

The green conception shows developers, property owners optimal green solutions and their economic and environmental impact

Сервис 3.

Design of certified green buildings



Result:

- Architecture
- Interior design
- Landscaping project
- Construction documents
- Green building certification

For what?

Developers, property owners receive construction documentation

Low carbon coffee manufacture (Tasty Coffee inc.)

First LEED-certified coffee roasting company in Russia

Scope of project:

- Green audit
- Low carbon conception
- Design of architecture, interior and landscape
- Construction documents
- LEED gold certification

1. Reducing of carbon footprint

Comprehensive architectural and engineering solutions reduce the carbon footprint of the facility by 40% (equivalent to 14 hectares of pine forest) or by

180 ton/year

2. Reducing the operation cost

Calculations of the cost of operation showed that the savings will be at least

90,000 \$/year

3. Health of the company's employees

Reducing of skipping work due to illness

up to 40%



Izhevsk, Design 2022, Construction 2022 - 2023

Green school for 1100 students.

First state school in Russia, that is certified by green standard

Scope of project:

- Research "School of future"
- Green conception
- Design of architecture, interior and landscape
- Construction documents
- Green Zoom gold certification

1. Health of children and staff

Reducing of skipping school due to illness

32 %

2. Increasing the period of compliance of the school with the requirements of the educational process

The school project was developed on the basis of the study "School of the Future in the logic of sustainable development" The service life of the school without capital investments is estimated at

50 years

3. Reducing the operation cost

Calculations of the cost of operation showed that the savings will be at least

46,000 usd/year



Izhevsk, Design 2021 - 2022, construction 2022 - 2024

Rooftop solar power plant (Tasty Coffee company)

The first solar power plant in Udmurtia, which has proven its profitability in a cold and snowy region

Scope of project:

- Existed building's survey
существующего здания
- Feasibility study
- Design
- Supply,
installation, commissioning
- Maintenance 2021 - 2022 г.

1. Energy production - 20% of total annual energy demand

35 481 kWh/year

2. Reducing the operation cost

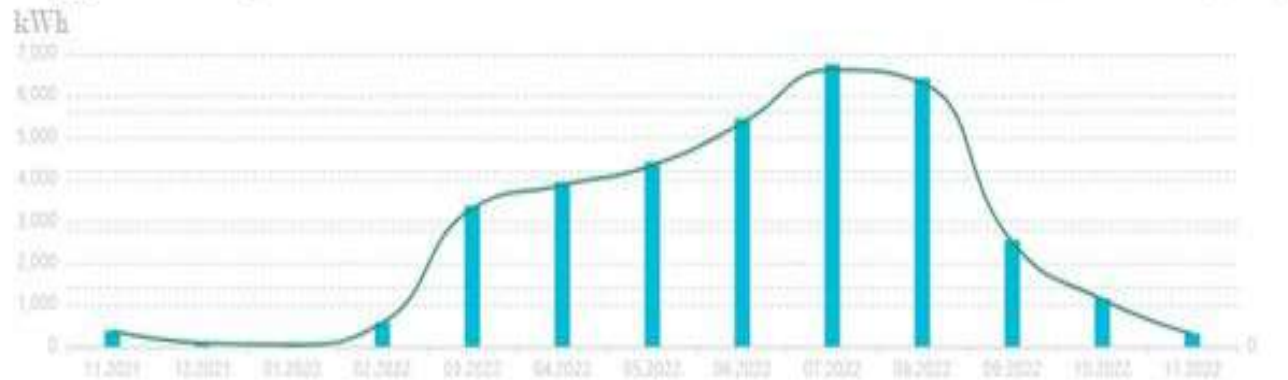
4,500 USD/year

3. Carbon footprint reducing

10 ton/year



Energy production : 35,481 kWh



Izhevsk, Design 2021, Construction 2021



grasslabdesign.com

Partners



Dmitry Zasyplin

Green engineer, co-founder



Ekaterina Labinskaya

Designer-researcher, specialist in a circular designer, co-founder.



Roman Nurgaliev

Architect



Architect

Urban designer



Maria Novikova

Architect