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Industrial Services

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Content

Photovoltaics: up to EUR 9 billion will be available from European funds in the coming years. CZK

Investments are available for modernisation and on **energy savings**, especially in **public and private buildings**. Parliament is discussing an amendment to the Energy Act to support photovoltaics.

Why does this apply to you?

- For the Czech Republic, tens of billions of CZK are available for renewable projects that can also be used by your company (Modernisation Fund, JTF, operational programs). Available for small and large sources, rooftops and on ground.
- The possibility of obtaining investment subsidies, the current high energy prices, the need for financial savings and the effort to ensure competitiveness are a significant motivation for investing in PV solutions for all types of companies.
- In the context of rising electricity prices, the installation of photovoltaics makes economic sense. However, the number of funds, the level of subsidies and the parameters for obtaining them are often confusing and the value of support varies.

What we offer:

Evaluation of the investment plan

- We will carry out an expert analysis, including putting it into context within the framework of current and upcoming energy legislation.
- We will prepare a technical evaluation of operating and investment costs in the form of a feasibility study.
- We will design an economic model that evaluates the profitability of the project for your operation.

Preparation of economic model

- We will develop an Excel tool with a DCF model to evaluate the profitability of an investment with the determination of the rate of return, with the possibility of future parameterisation.
- We will create a detailed list of used parameters, assumptions, construction and functionalities of the model.

Proposal of solutions, presentation of results and provision of grant support

- We will prepare a PPT presentation of the main results of the model for management.
- We will provide subsidy support.
- We will arrange the processing of an energy license.

Our experience:

Evaluation of the investment plan of PVPP on buildings Panattoni

PANATTONI

- evaluation of the investment plan
- comparison of operating models in current and upcoming legislation
- visualised results and recommendations

Analysis of verification of feasibility of construction of solar energy parks

PKÚ

- analysis and evaluation the usability of reclaimed areas
- determination of the aggregated estimated potential of installed capacity at the sites concerned after construction and significance for the energy system

Development of renewables by 2030

Svaz moderní energetiky

- assessment of the impacts of the National Climate and Energy Plan
- quantification of proposed solutions for the development of RES in the Czech Republic, including their economic benefits

Electromobility – share of total car sales increased to 9% last year and growth continues

This year, in the first quarter **sales of electric cars are up 75%**. On the Czech market, up to 70% of these sales are corporate customers. At Deloitte, we propose a strategy for the use of electromobility not only for energy companies, but also for other companies.

Why does this apply to you?

At present, the representation of electric cars in domestic companies is a minority, and in the near future there will be significant adoption. This year, the overall share is expected to increase to 13%. Reasons for the growing interest in electromobility in companies:

- lower maintenance and fuel costs compared to vehicles with a traditional combustion engine
- environmental aspect in the form of lower local emission, noise load and ESG taxonomy
- planned regulations and the possibility of using subsidies for the purchase of a car and hardware associated with charging

Interest in electromobility is slowly growing, and this trend will continue in the future.

What we offer:

A comprehensive solution to help with the electrification of the corporate fleet

- Analysis of electromobility development, insight into market demand potential and competitor mapping
  - creation of detailed market segmentation
  - prediction of possible price developments

Evaluation of market potential and recommendations for further product development

- creation of economic evaluation (Excel tool with DCF model)
- preparation of a strategic business plan with a managerial summary

Consultation and provision of grant support

- identification of suitable subsidy instruments and available tax relief to support the electromobility programme in the 2022+ financial framework

Our experience:

Development of electromobility in the city of Brno

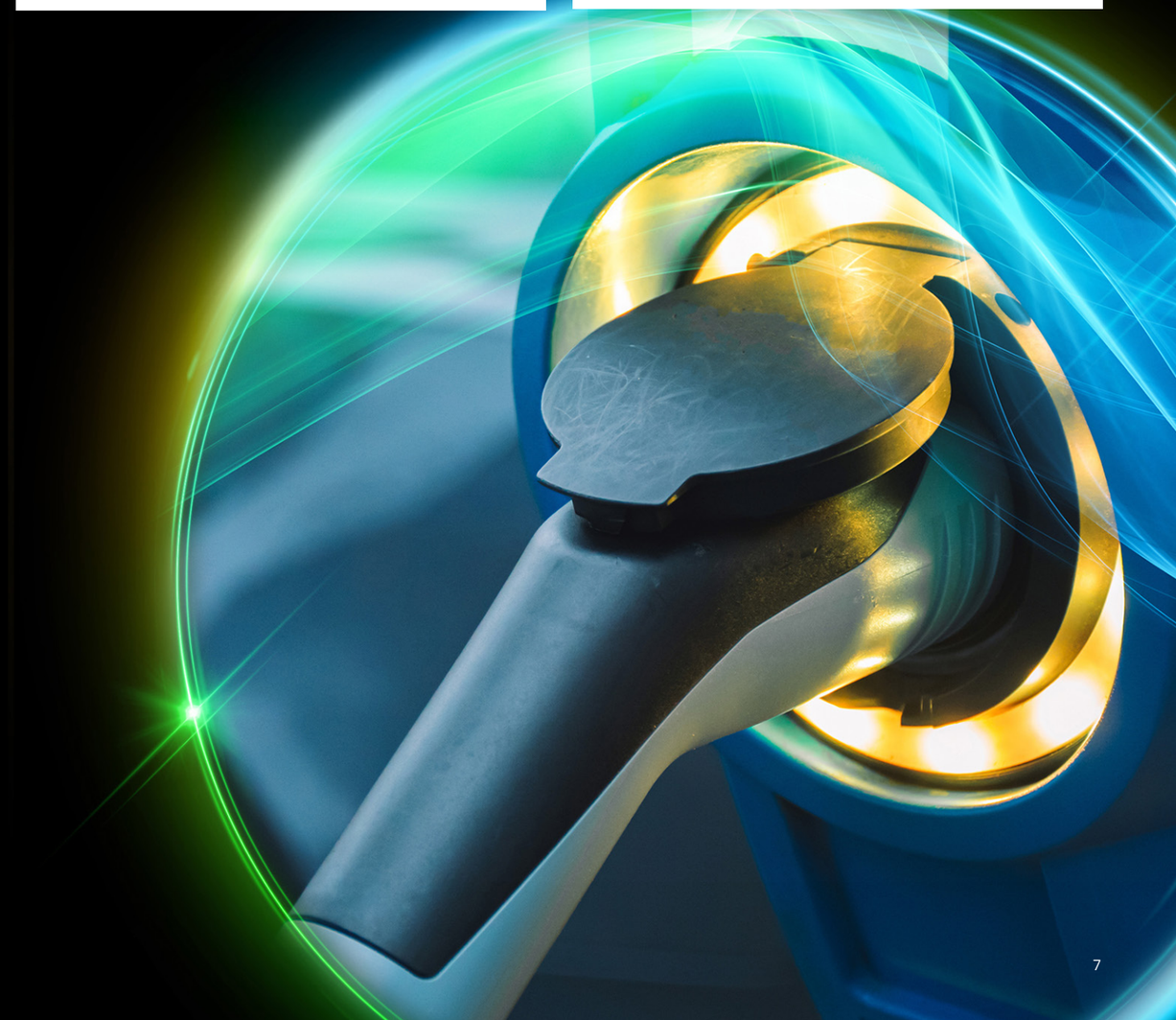
TEPLÁRNY BRNO

- elaboration of an updated strategy for the development of electromobility in Teplárny Brno
- elaboration of a business, action and marketing plan
- evaluation of grant possibilities and design of the organisational structure

Preparation of a business plan for the area of recharging Infrastructure

TEPLÁRNY BRNO

- preparation of a medium-term business plan
- elaboration of an action plan describing in detail the activities aimed at fulfilling the business plan
- formulation of IT needs
- risk analysis plus recommendations
- elaboration of a marketing plan



Industrial Services

Hydrogen strategy – the number of pilot projects is increasing

The Czech hydrogen market is new and for now **underdeveloped**. The aim is to: **dramatically reduce costs and simultaneously build** infrastructure that should **accelerate** the use of hydrogen, mainly in **transport**.

Why does this apply to you?

- Interest in hydrogen is growing at a fast pace. The company car market is systematically turning away from diesel engines and hydrogen is becoming a new potential fuel. Hydrogen can be used in rail, bus or waste collection. We expect to see rapid growth in demand.
- The first of the investment barriers is unclear and inconsistent legislation. This is beginning to be addressed in the EU/CR and we are monitoring it in detail.
- The use of support programmes is aimed at the production of green hydrogen from renewable sources.

What we offer:

Technical-economic model of hydrogen production (Excel):

- calculation of LCOE hydrogen production for different types of electrolysers with regard to technology degradation, storage and compression costs, different utilisation of electrolysers, etc.
- calculation of LCOE hydrogen production in the case of electricity supply from local solar and wind supply
- calculation of LCOE when combining electricity from local RES and spot electricity prices when setting the threshold for the purchase price on the market
- model for calculation of the theoretical potential of hydrogen production in the form of electrolysis with respect to electricity and water consumption

Analysis

- strategic documents dealing with hydrogen development and legislation
- hydrogen consumption with an evaluation of the probability of their implementation
- stakeholders involved in the production and consumption of hydrogen in the Czech Republic

Our experience:

Analysis of the SUAS environment and synergies with existing plans

SUAS GROUP

- description of the use of hydrogen and alternative variants of the use of SUAS energies
- summary of the current status of the project and overview of the next steps
- use of hydrogen in local partnerships

Feasibility study plus grant application

ForHEnergy Vision is not a dream

- technical and economic assessment of hydrogen production, compression and storage
- creation of an economic model of hydrogen production in the form of electrolysis
- creation of project schedule

Potential mapping

SD Severočeské doly a.s. člen Skupiny ČEZ

- identification of technical potential for hydrogen production in the form of electrolysis in reclaimed locations
- calculation of emission savings when the potential is met and calculation of the total contribution to the decarbonisation strategy

Report for CEE region

Gas Infrastructure Europe

- analysis of legislative and political barriers for the development of hydrogen and biomethane production in the CEE region

Revision of the energy purchasing strategy

The energy sector is undergoing fundamental changes due to a greater emphasis on **climate protection** and **renewables support**. These changes make it one of the least predictable industries.

Why does this apply to you?

The European energy market is undergoing a number of changes: increasing the volume of renewable sources, the impact of political events or new regulations.

Your company needs to deal with:

- **the increase in energy prices and the need to secure their supply**
- the question of whether it makes sense to **invest in renewables**
- how to understand **new regulations and legislation**

It is necessary to orientate yourself in what is essential for your business and look for such solutions and technologies to meet the commitment to people and environmental sustainability requirements.

What we offer:

- We will prepare a comprehensive analysis of the Czech energy market, as well as markets in other countries, including major regulations, with the aim of determining individual technological potential based on selected parameters.
- We will help you identify what is important, propose measures to save energy and reduce costs, and develop a strategy to achieve carbon neutrality.
- We create econometric models and software application solutions. These include, for example, forecasting energy variables, predicting grid failures or wind and solar power generation. It includes a guarantee of financing, a reference to PPA developers and subsequent management and implementation.

Our experience:

Energy purchasing policy

WOLTERS EUROPE

- elaboration of energy purchasing policy in a defined scope in order to assess the energy purchase policy – electricity and gas
- analysis of the current situation and tender for energy suppliers

Assessment of installations against EU ETS legislation

DEVRO

- assessment of investments in new boilers as a source of technological heat
- preparation of forecasts of legislative changes in the horizon of the current trading period
- expert estimate of the development of the price of emission allowances

Energy Management Strategy (ESG)

At Deloitte, we have experience from approximately 20 completed ESG projects for various types of major companies, primarily in the energy segment. The obligation to report non-financial reporting will fall on a number of large companies.

Why does this apply to you?

Mitigating the effects of climate change is beginning to fully manifest itself in the requirements for the basic functioning of business and the requirements for bank financing.

- Czech banks started requiring ESG reports from their clients in **2021**.
- From **2024** large regulated companies will be **required to cite key ESG** data in their **annual reports**.

The right sustainable business strategy will ensure that you remain relevant to your customers in the future and will allow you to get the edge you need over the competition and access to finance.

What we offer:

Preparation ESG report

- We will perform an initial analysis to determine the current state.
- We will provide instructions to collect .dat and calculation Indicators.
- We will prepare the content of the report tailored to the target audience and regulatory requirements.
- We will set strategies and goals to create an ESG report.
- Arrange compliance with the chosen reporting framework.
- We will propose the fastest solution for obtaining missing data and information.
- We will prepare a plan for future independent reporting, including IT processes and verification.
- We will prepare the company for a possible ESG assessment by rating agencies.

Our experience:

Preparation of sustainability report

SEVEN ENERGY

Non-financial reporting

Kaufland

ESG Reporting

EP Infrastructure

Appraisal of the process evaluation Mining Sites

MINISTERSTVO PRŮMYSLU A OBCHODU

ESG Reporting

EPH

Preparation of sustainability report

Development of sustainability strategy

Oil distribution & storage company

Market Analysis

PRE

Public support for investment projects

There are hundreds of billions at stake, mostly in the form of **direct subsidies**. At Deloitte, we will offer you comprehensive advisory services related to public support and guide you through the entire project cycle.

What we offer:

1. Presentation and categorisation of the most important support programs prepared for the period 2023+

2. Verification of the possibilities of using support programmes in relation to defined projects

3. Detailed analysis of benefits, conditions and liabilities for various support programs
The following are available in select regions. **Specific grants with more favourable support conditions**.

4. Definition of action steps for maximum utilisation of funds from available support programs
The future may bring more and more pressure to decarbonise. It is therefore necessary to **evaluate continuously.**

- **Environmental analysis**
- **Selection of a suitable program**
- **Preparation of grant application and coordination of related activities**
- **Project management support**

Possibilities:

Grant programs are prepared to support various types of projects

- Renewable energy sources (photovoltaic power plants, geothermal energy sources, wind farms, small hydroelectric power plants)
- Clean mobility (electromobility, CNG/LNG, hydrogen)
- Energy-saving activities (new or reconstructed energy sources, energy accumulation, modernisation of distribution systems and lighting systems, use of waste heat, reducing the energy demands of buildings and production and technological processes, etc.)
- Modernisation of heat supply systems
- Circular economy

Naše zkušenosti:

Continuous analysis of public support
Preparation of grant application (energy-saving measures)

Nuclear Energy

The European energy sector has undergone a number of changes in the last year and discussions are moving in new directions, one much discussed direction being the return of nuclear energy as a stable source.

Why does this apply to you?

- Nuclear power is an emission-free, stable source and it is an ideal tool to tackle climate change and to fulfill the decarbonisation goals set by the European Union. Over the past year, discussions on nuclear energy have once again come to the fore.
- Several nuclear reactors are planned for construction within the EU, with France planning up to 14 reactors, Poland 6 reactors and the Czech Republic at least 4 reactors.
- Small modular reactors (SMRs) also offer a great opportunity. Their construction is expected not only from large power companies but also from smaller heating and manufacturing plants to cover their own consumption.

What we offer:

Comprehensive advisory services in the field of nuclear energy

- We offer comprehensive services in the field of nuclear energy, focusing on consulting on the construction of new sources, financing of construction, regulatory environment, market mapping, as well as decommissioning of nuclear power plants.

port of the nuclear technology supplier selection process

- We are able to provide overall support in the selection of a supplier. Setting up the evaluation of individual bids, communication with suppliers, risk identification and mitigation, etc.

Nuclear expertise from Czech and international projects

- We have experience from several projects focusing on nuclear energy.
- In a project for the European Commission, we mapped the entire nuclear ecosystem in the EU and are therefore able to offer a network of relevant contacts

Our experience:

Study on the European nuclear energy ecosystem: is it fit for the EU's climate objectives?

- Assessing the readiness of the European nuclear ecosystem for the construction of new nuclear power plants
- Mapping of industry, human capital, regulatory, supply chain and other relevant parts.

Comprehensive assessment of the bid evaluation manual for the delivery of a new nuclear unit

- Assessment of evaluation methods and techniques in relation to IAEA methodologies and current standards
- Assessment of transparency and equal treatment of tenderers
- Overall assessment of the accuracy and consistency of the evaluation methods

Economic model of the waste management fund

SÚRAO

- Preparation of a long-term economic model of the waste management fund

Optimisation of production resources and trading

Modern energy is a dynamic environment, in which process automation and advanced data analytics play a major role. At Deloitte, we know the tools you can use to optimise your processes and thus **maximise profit**.

Why does this apply to you?

- Sharp changes in commodity prices on the market complicate the planning of energy production operations, thanks to which the profitability of individual production sources changes during the day and there is no single optimal operating mode.
- The system for optimising the production portfolio allows you to maximize the margin while taking into account the current conditions in the energy markets. At the same time, it saves staff time to manually create operational plans.
- Commodity prices are highly volatile and inappropriate strategies, and uncontrolled risks can have huge impacts on society. Automation saves time and enables more effective control over processes and risks.

What we offer:

Business analysis and strategy

- Mapping the current state of strategy, processes, IT infrastructure, human resources
- Proposal of **new strategies in trading** process and data modeling, organizational structure, business architecture and IT architecture

Optimisation of the production portfolio

- Mapping of clients' portfolios (production resources, cash flows, contracts)
- Compilation of mathematical-financial model of the portfolio in the instrument BoFit plus Integration with other systems and preparation of optimal operation reports

Support systems Trading

- Implementation, customisation and management of tools for energy trading (e.g. TDMS – smart data warehouse for Trading data ETRM – business management, risk management support, scheduling)
- Design of business and IT architecture, integration with surrounding systems, creation of reports

Our experience:

Optimisation of the production portfolio

SUAS GROUP · TEPLÁRNY BRNO

Support systems Trading

SUAS GROUP · MND

Business & Strategy

SUAS GROUP · PRAŽSKÁ PLYNÁRENSKÁ · SPP

Smart energy management

Monitoring and control can bring **energy savings**. At Deloitte, we know the action steps to unlock the potential for their implementation. We will show you how to **respond flexibly** to changes and **how to reduce operating costs**.

Why does this apply to you?

Decarbonisation, decentralisation and digitalisation of the energy sector are the main reasons for seeking savings in emissions and energy consumption in buildings and operations.

The increasing share of renewable energy sources, the development of electromobility, the need to charge cars, the level and volatility of energy prices, the use of battery storage – all this forces us to stop looking at energy consumption through the lens of months and years and start monitoring and managing it in real time and in more granularity.

What we offer:

Analysis of historical data and finding potential for savings

- Analysis of historical data of energy consumption of a building or operation
- Build a consumption data model, identification and **quantification of energy saving potential**

Monitoring of operational data and management reporting

- Collection and transformation of current operational data on energy consumption
- Agnostic **Tool for managers** with automated notification system

Application of advanced data analytics

- **Optimal control of** energy flows and emissions thanks to integrated prediction modules
- Continuous **data monitoring and carbon footprint** including monitoring of specified emission KPIs for individual buildings and groups of buildings

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