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# CDM Engineering Ukraine Company Presentation



### **Company Profile**







**Engineering** 



**Environmental Management** 



Consulting



**CDM Engineering Ukraine** is an independent **Ukrainian legal entity** that is **American owned and managed**. We are an FCPA compliant company consistent with US anticorruption policy. We fully understand and comply with all anticorruption legislation, and maintain full transparency in ownership and financial reporting as is required to work with governmental technical assistance programs, including U.S. Department of State and OPIC-financed investments.

Most of our team members are **fluent in English** and have proven experience in delivering work according both **Ukrainian and international standards** and requirements, including various design specifications, and FIDIC contract implementation.



### **Company Profile**

### **Our clients:**



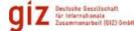




























### Our primary areas of expertise:

- Full scale project management, including design and procurement support, as well as technical supervision and quality control from start-up through commissioning;
- Civil and industrial design (all stages);
- General contractor services;
- Technical supervision / 'Tekhnadzor' services;
- Technical due diligence;
- Environmental and social impact assessment (EIA, ESHIA, ESDD, site audits);
- Health and safety audits;
- Assessment of regulatory compliance to international standards (EBRD, EIB, WB, OPIC);
- Development of water resource, wastewater, and waste management strategies;
- Assistance with investment identification, capacity building and training in the public sector.



### **Engineering Services**



**CDM Engineering Ukraine** offers all of the necessary professional, human, and technical resources to **manage turnkey investment projects** and participate in any and all stages of project development, from **financial planning and cost estimation to commissioning** from an engineering standpoint. With our in-house experience and a wide network of local subcontractors and suppliers, our company can offer full-scale support in the technical development and management of **infrastructure investments** in Ukraine with an emphasis on **value to the client**. Our technical team have experience in working according to international standards often demanded by multinational engineering or EPC companies and IFIs, including **FIDIC contract conditions**.







## **Engineering Services**





Civil and Industrial Design	We provide <b>high quality design services</b> covering the complete cycle of design documentation development, including concept design, basic design ( $\Pi$ ), detailed design ( $P\Pi$ ) and working documentation ( $P\Delta$ ) stages, as well as <b>author supervision</b> during construction. Our design work can, upon request, be done in concert with Building Information Modeling (BIM) via 3D software. All works are controlled by a certified <b>Chief Project Engineer (<math>\Gamma M\Pi</math>)</b> or a <b>Chief Architect (<math>\Gamma A\Pi</math>)</b> .
Engineering Consulting	We offer tailored services for different aspects of <b>technical due diligence</b> , <b>prefeasibility/feasibility assessments</b> , and other specific services such as <b>commissioning support</b> , <b>procurement and contracting</b> to address specific client needs in different stages of project development.
Project Management	We offer <b>project management</b> support to all active IFIs such as USAID, the EBRD, GIZ, NEFCO, and the EIB independently and in collaboration with major international engineering firms <b>towards the successfulin implementation</b> of their projects in Ukraine.
Site Supervision	We strive to understand and meet our clients' specific needs while organizing our site supervision assignments. Our core objective is to represent the client's interests during construction and control the quality of works, schedules being maintained, and costs remaining controlled. Our team is experienced in navigating and solving complex problems, and in assisting clients in realizing their investments while ensuring compliance with their respective corporate standards and following the requirements of Ukrainian law.



## Selected Projects in Civil and Industrial Design Projects (1 of 2)





#### **USAID Economic Resilience Activity**

#### Subcontractor to DAI Global

CDM is performing a full scope of engineering and environmental management services for the project, including feasibility studies, **design documentation and bills of quantity,** cost estimations, procurement assistance, construction management and quality control for rehabilitation or improvements in existing public infrastructure projects:

- Public administration and university buildings;
- Local roads & bridges;
- Water supply/sewerage networks;
- Waste management infrastructure.

Project Budget: USD 61,818,364 Ukraine, 08.2018 – 08.2024





#### **GIZ Project: Special Assistance Programme East Ukraine**

### Subcontracted by Hydroplan Ingenieur Gesellscahft

Development of design documentation for capital repair of buildings in health and social services sector, covering internal restoration, modernization for disabled persons, renovation or replacement of electrical networks, HVAC systems and water supply and sewerage networks, development of energy efficiency solutions.

- > Center for Primary Health Care in Donetsk region;
- > Lyman Central District Hospital in Lyman city, Donetsk region;
- > Territorial Center for Social Services of the Pokrovsky City Council, Donetsk region.

Ukraine, 10.2020 - 07.2021





## Selected Projects in Civil and Industrial Design Projects (2 of 2)





### EU programme "Better Skills for Modern Ukraine" (EU4Skills)

### Subcontractor to ICE/Expertise Advisors Consortium

Support the Ministry of Education and Science in initial evaluation as part of European Investment Bank's due diligence for appraisal of a loan operation for 10 future Vocational Education and Training (VET) Centers of Excellence in Dnypropetrovsk, Odesa, Kharkiv, Donetsk, Ivano-Frankivsk, Ternopil, Volyn, Zakarpattya and Chernihiv regions and Kyiv city.

- ➤ Inspection and evaluation of the selected VET facilities;
- > Development of conceptual designs, definition of the type of investments and assessment of investment costs;
- Preparation of Terms of References for the Project Implementation Unit (PIU).

Ukraine, 01.2021 - 07.2021



### **Design Services for a Large Multinational Agricultural Company**

- Engineering inventory and technical due diligence of the full design documentation of an agro-processing and grain storage facility;
- Water basin design: development of design documentation for reconstruction of rain and wastewater reservoirs;
- Concept design for relocation of a 10 kV line;
- > 3D modeling for new grain pipelines;
- > Engineering flow diagrams (EFD) of the boiler house for systems: hydraulic, air, biomass/gas supply, gas treatment, ash handling;
- > Piping and Instrumentation Diagram (PID) scheme of the sewage system.

Ukraine, 2019 - 2020





## **Selected Projects in Engineering Consulting (1 of 2)**





#### **Technical Review of the Conditions of Voda Donbasu**

### Contracted by Tetra Tech ES, Inc., Lead Consultant on USAID Energy Security Project

Municipal Enterprise "Voda Donbasu" is one of the largest utilities in Ukraine responsible for water and wastewater management in the Donetsk region. The contract covered:

- > Analysis of water demand and supply for Voda Donbasu;
- Assessment of electricity usage and water quality;
- Options study (pre-feasibility) recommended changes for water conveyance and network, asset decommissioning and replacement, renewable energy involvement, preliminary implementation plan.

Ukraine, 07.2020 - 04.2021





### NEFCO - Neighborhood Investment Platform (NIP) Ukraine Water Programme (UWP) / Subcontractor to NIRAS A/S

Engineering consulting services to improve energy efficiency in municipal water & wastewater systems resulting in cost savings and corresponding reduction of CO2 emissions; decrease environmental pollution by improving municipal WWTPs; improve quality of water services to citizens.

- ➤ Water safety plan following WHO guidelines;
- Long-term investment program development;
- Financial models for a selected period (at least 30 years) for each water utility;
- ➤ Water balance and non-revenue water management plans;
- Professional training the water utility staff.

Ukraine, 02.2020 - 02.2022





## **Selected Projects in Engineering Consulting (2 of 2)**





### **Engineering Consulting for Construction of Scatec Solar PV parks**

#### Subcontractor to Fichtner GmbH

Scatec Solar Ukraine has developed a solar power plant in the south of Ukraine with a total capacity of 148 MW. The new plant is planned to provide energy to about 76,000 households.

Services included an **independent review of mechanical completion and take over** according to the EPC contract, covering:

- Mechanical completion;
- > Test on completion;
- Hand over to the Customer.

Ukraine, 07.2020 - 12.2020





#### **Technical Consulting Services for a Wind Farm Construction**

### Contracted by EuroCape Ukraine

Road map to commissioning of Phase 1 of a wind farm: 27 wind power-generating turbines, 35/3300kV transformer substation "Zaporizhskaya", 330kV overhead power line, buildings, structures and networks.

- Review of the approved project documentation and actual construction progress
- Construction execution documentation review for completeness, quality, and accuracy, covering all the licenses, certificates, test protocols, as-built drawings, available permits
- Estimation of timeline and recommendations for rapid commissioning of the substations and connection to the 330 kV electrical grid

Ukraine, 05.2020 - 07.2020





## Selected Projects in Project Management & Site Supervision (1 of 2)





### **USAID Economic Resilience Activity**

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- Public administration and university buildings;
- Local roads & bridges;
- Water supply/sewerage networks;
- Waste management infrastructure.

Project Budget: USD 61,818,364 Ukraine, 08.2018 – 08.2024





### **Technical Supervision for Podilskyi Cement**

### Contracted by CRH

Technical supervision services for the construction of a cement dispatching facility located in Vyshneve, Kyiv region.

- Availability of documents confirming the quality characteristics of structures, products, materials and equipment;
- Compliance of completed construction and installation works with design, state requirements, building codes and technical specifications;
- Notification to the General Contractor about the non-compliance of products, materials and equipment with the requirements of regulatory documents;
- > Execution of acts of work performed with defects.

Ukraine, 07.2020 - 03.2022





## Selected Projects in Project Management & Site Supervision (2 of 2)





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Ukraine, 07.2020 - 12.2020



### **Project Management and Engineering Services**

### for a Large Multinational Agricultural Company

Project management for construction for an agro-processing and storage (grain elevator) facility in Zhytomyr Region.

- Observation of installation works to confirm the quality requirements in accordance with the Client's technical standards;
- Monitoring, verification and control of cost when project works are conducted on a T&M basis;
- ➤ Management of extra's /changes /modifications during construction;
- Technical consulting of commissioning, mechanical, electrical and instrumentation engineers;
- Procurement support services.

Ukraine, 02.2018 - 12.2020





### **Environmental Management Services**



**CDM Engineering Ukraine** offers a comprehensive range of environmental consulting services to clients in various industrial sectors. Our environmental services team includes experts with backgrounds in the **environmental and social sciences**, **health and safety**, **chemistry**, **economics and law**.

Most of our experts are fluent in **English** and have experience working with both **local and international standards** (EBRD, World Bank, EU). Our experts have completed extensive professional training and possess all recognized professional certifications (**ISO**, **OHSAS**).







### **Environmental Management Services**





Environmental and Social Impact Assessment (ESIA)

Our experts are certified and experienced in delivering ESIAs in accordance with international requirements (EBRD, IFC, EIB) as often requested for the assessment of investments financed by IFIs. Our team has performed this study for projects in various sectors. This type of assessment covers all relevant direct and indirect environmental, social, health & safety impacts and issues of the project's operations at all the stages of the project cycle: pre-construction, construction, operation, and decommissioning and closure.

Environmental Impact Assessment (OVNS & OVD) We provide Environmental Impact Assessments as required by Ukrainian law, both **OVNS** as part of every project design, and **OVD** as required for construction permitting purposes.

Environmental, Health & Safety (EHS)
Consulting

**ESDD** and **HSDD** are the systematic studies of the environmental, social, health and safety compliance of an operation with local and/or international standards, and the potential impact of planned changes to that operation. IN addition to corporate sustainability benchmarks that are increasingly common, EDD and HSDD are applicable for mergers & acquisitions, operations modernization / reconstruction, business restructuring, attraction of equity investment / IPO, or applying for IFI funding. For the purposes of EDD, we can provide soil, water and air testing at laboratories in or outside Ukraine.

Environmental Site Assessment (ESA): Phase I and II

A Phase I ESA is aimed at the identification of potential environmental risks and liabilities of a specific location (site) that may have resulted from existing or previous land use or the use of territory adjacent to the subject location. A Phase I ESA results in **initial conclusions** on potential risks to human and/or other receptors and determines whether there is a need for further investigation, and the scope of those investigations (Phase II ESA Exploratory Investigation).



## Selected Projects in Environmental & Social Impact Assessment: ESIA, OVD (1 of 3)





Environmental and Social Impact Assessment (ESIA) for the QTerminals
Olvia Sea Port Concession Project

Subcontractor to Golder Associates GmbH

ESIA performed in line with EBRD Performance Requirements, IFC Performance Standards and Ukrainian regulations.

The Project is aimed to renew and upgrade the existing port facilities and develop a new grain terminal with a turnover capacity of 2 million tons in the Port of Olvia.

Ukraine, 03.2021 - 01.2022





Environmental Impact Assessment (OVD), and Monitoring of Birds and Bats Annual Cycle for Wind Farm Projects

### Contracted by Acciona Energy

Environmental consulting services included:

- Monitoring of bats and birds annual cycles on the territories of the wind farm projects;
- Description of the full Environmental Impact Assessment (EIA/OVD) procedure in Ukraine;
- Preparation of Environmental Impact Assessment Reports (OVD) in accordance with Ukrainian Law on OVD for development of two wind farm projects in Vinnytsia and Odessa regions.

Ukraine, 04.2021 - 04.2022





## Selected Projects in Environmental & Social Impact Assessment: ESIA, OVD (2 of 3)





Environmental and Social Impact Assessment (ESIA) of a Chemical Facility in Lugansk Region

Contracted by "RPE Zarya"

ESIA performed according to IFC Performance Standards on Social & Environmental Sustainability, 2012 and national legislation.

The assessment considered emissions of pollutants into the atmosphere, waste management, water intake and discharge of wastewater into local water bodies.

Ukraine, 10.2020 - 02.2021





Environmental and Social Impact Assessment (ESIA) of Solar Farms

**Contracted by Hero Future Energies** 

ESIA for the construction of two solar farms in the Dnipropetrovsk region with installed capacity of 51.8 MW performed according to IFC Performance Standards on Social & Environmental Sustainability, 2012.

Ukraine, 08.2019 - 01.2020





## Selected Projects in Environmental & Social Impact Assessment: ESIA, OVD (3 of 3)





## Environmental and Social Impact Assessment (ESIA) of American Hospital Kyiv

ESIA according to IFC Performance Standards on Social & Environmental Sustainability, 2012 and national legislation.

The study included sampling and testing of soil and surface water at European laboratory.

Ukraine, 05.2018 - 01.2019





### **Environmental and Social Impact Assessment (ESIA)**

for UkrGasVydobuvannya

Environmental Impact Assessment (OVD) in accordance with the **Ukrainian Law on OVD**;

ESIA of the construction/modernization of several compressor stations performed in line with EIB Environmental and Social Standards.

Ukraine, 11.2018 - 03.2019





## Selected Projects in Environmental, Health and Safety Consulting (1 of 2)





Environmental and Social Due Diligence (ESDD) of a Pharmaceutical Company Operations

Contracted by ProCredit Bank Ukraine

Third party ESDD of a pharmaceutical company's operational activity is performed in support to the **financing request of the bank's long-term client** in amount that requires external due diligence in line with the bank's E&S management system.

ESDD performed in accordance with the relevant international financial institutions' requirements: EBRD, EIB, IFC, World Bank.

Ukraine, 08.2020 - 10.2020





Environmental, Health & Safety Due Diligence (EHSDD) of an Asbestos-cement Production Workshop

Contracted by Ivano-Frankivsk Cement (IFCEM)

The EDD covers potential environmental, health & safety risks associated with asbestos, which is used as a raw material by IFCEM in an asbestos-cement production workshop.

The EDD includes a review of the EHS protective and preventive measures applied during raw material storage, the manufacturing process, finished product storage, and waste storage and management.

Ukraine, 08.2019 - 09.2019





## Selected Projects in Environmental, Health and Safety Consulting (2 of 2)





Environmental, social, and labor regulatory support for the development of a PV plant

### Contracted by Acciona Energy

Environmental, social, and labor regulatory support for the construction of a PV plant with a power output of 57 MW during 2018-2019 in a village near Kyiv, Ukraine.

Revision of the compliance status of the solar plant construction site to national regulations, EBRD standards and the Client's corporate requirements, as well as subsequent periodic supervision.

Ukraine, 11.2018 - 03.2019





Various Environmental, Health and Safety (EHS) Consulting Services

Local Support to ERM Polska Sp. Z o.o.

- > EHS due diligence of industrial, FMCG and food production companies;
- > EHS compliance audits of office and manufacturing facilities;
- > EHS site assessments and audits;
- Advisory on compliance with Ukrainian legislation.

Ukraine, 2015 - 2021





## Selected Projects in Environmental Site Assessment: Phase 1 & 2



### Environmental and Social Audit (ESA) of an FMCG Retail Company

### Contracted by an International Private Equity Fund

ESA of a brick and mortar warehouse and retail company in Ukraine, covering the warehouse & distribution center, head office and retail shops.

Assessment of compliance of site operations with the requirements of applicable local legislation and international requirements of IFC Environmental and Social Policy and Performance Standards, identification of compliance gaps, environmental and social impacts and risks, necessary mitigation and follow-up actions, as well as a managing/monitoring regime.

Ukraine, 01.2021 - 04.2021





### Phase II Environmental Site Assessment (ESA) of a Agricultural Facility in Ukraine

### **Contracted by Remington Seeds**

The purpose of the project is confirmation of the presence or absence of potential environmental impacts, which may be present as a result of the historical or current use of the subject site.

Development of the Phase II ESA program included:

- > Identification of the boreholes and monitoring wells location;
- Groundwater sampling;
- > Required laboratory analysis in a European laboratory;
- Reporting.

Ukraine, 08.2019 - 10.2019





## **Consulting**



**CDM Engineering Ukraine** has extensive experience in working with both local and international clients through the implementation of **IFI-funded projects**. Our technical capacity in delivering sustainable results in the public sector is well established, and has provided our firm with a level of experience few other Ukrainian organizations can demonstrate.







## Consulting





Resource Management	Our team is experienced in the development of water, waste and energy resource management strategies for both private and public sector clients. These assignments have included regulatory and market research, technical solutions development, compliance checks against relevant standards and requirements (national, European, corporate).
Regulatory Support	Ukrainian regulations have been undergoing an alignment procedure towards approximation to EU legislation for several years. Our team is proficient in relevant legislation and has an excellent track record in consulting both local and international clients on regulatory matters, including support to various permitting steps in the engineering and environmental sectors.
Capacity Building	Ukrainian state bodies often require external assistance and guidance in relation to implementation of their strategic goals. The CDM team includes a number of senior institutional, financial and industry experts to provide capacity building and institutional strengthening services as are often required as a part of IFI technical assistance. These assignments include training development and delivery, pilot project elaboration and implementation support, corporate development planning, and the elaboration of good governance as an approach for sustainable development.
Project Planning	We have provided technical support to international companies in various sectors for planning and implementation of their <b>investments in Ukraine</b> . Our unique team combines engineers, project managers, environmental and social experts, finance experts, and the needed administration to support the development of ambitious goals. Such composition allows us to evaluate the <b>feasibility of projects</b> from the most relevant perspectives, to account for specific market conditions, to assess the <b>political and economic risks and potential benefits</b> , and ensure <b>compliance with local and international regulations</b> .



## Selected Projects in Resource Management Consulting (1 of 2)





### NEFCO - Neighborhood Investment Platform (NIP) Ukraine Water Programme (UWP) / Subcontractor to NIRAS A/S

Engineering consulting services to improve energy efficiency in municipal water & wastewater systems resulting in cost savings and corresponding reduction of CO2 emissions; decrease environmental pollution by improving municipal WWTPs; improve quality of water services to citizens.

- ➤ Water safety plan following WHO guidelines;
- Long-term investment program development;
- Financial models for a selected period (at least 30 years) for each water utility;
- ➤ Water balance and non-revenue water management plans;
- Professional training the water utility staff.

Ukraine, 02.2020 - 02.2022





### **Puhovichi Solid Waste Project**

### Contracted by European Bank for Reconstruction and Development

Corporate Development and Stakeholder Participation Programme.

- Development and implementation of a Financial and Operational Performance Improvement Programme (FOPIP), including the ESAP, the ESMP and development of ISO 14001 and ISO 45001 management systems, Company's Environmental and H&S Policies;
- Development and implementation of Stakeholder Participation Programme (SPP) for newly arranged solid waste management Company;
- Assessment of existing social support mechanism and presentation of recommended improvements.

Belarus, 05.2019 - 12.2021





## Selected Projects in Resource Management Consulting (1 of 2)





### **GIZ Project: Green Modernization of the Ukrainian Economy**

### Subcontractor to RWA Group

Development of a national solid waste management strategy and action plan for Ukraine. The Strategy set overall directions and adopt high level policy settings, targets and incentives, concerning the following waste streams:

- Municipal solid waste;
- Industrial and commercial non-hazardous waste;
- Agricultural waste;
- Construction and demolition waste;
- Health care waste;
- Hazardous waste.

Ukraine, 08.2016 - 05.2017





### **GIZ Project: Integrated Urban Development in Ukraine**

### In partnership with RWA Group

Development and delivery of a training programme for city administrations in municipal waste management, covering:

- > Waste management policy overview and technical aspects;
- System definition and costs: cost recovery, tariffs, and investment finance and decision rules;
- > Institutional and organizational aspects of waste management. Private sector involvement.
- > Preparation of draft municipal waste management action plans.

Ukraine, 01.2019 - 11.2019





## Selected Projects in Regulatory Support and Capacity Building





Assistance to the U-LEAD with Europe Programme on the preparation of the capacity development measures Thematic Support Package (TSP):

'Steps for Leaders' in the field of public infrastructure

### Contracted by GIZ

Development and delivery of trainings for Amalgamated Hromadas (AHs) senior management for long-term investment planning in key infrastructure within the waste management and water supply and sewerage sectors to better approach both national funds and international financial institutions such as the EBRD, KfW, or the EIB.

Ukraine, 04.2020 - 06.2020





### Strengthening Social Infrastructure for the Absorption of Internally Displaced People

### Contracted by GIZ

Assistance to 15 municipalities from Kharkiv, Dnipro and Zaporizhzhia regions to successfully prepare social infrastructure projects to be submitted for different national and international donors.

#### Activities include:

- > Training local authorities in the definition and application of feasibility studytype analysis based on best international practice;
- Support for the elaboration of pilot infrastructure projects to be submitted to national investment funds.

Ukraine, 11.2017 - 11.2018





### **Company Management**



DANIEL ASPLEAF

Director / Project Manager

**Degree: MS in Chemistry** 

Years of experience: 23

Owner and Managing Director of CDM Engineering Ukraine, Daniel Aspleaf has a Master's Degree in Chemistry from the University of Washington (USA) and has over 20 years of professional experience, 12 of them in Ukraine, Eastern Europe and the CIS countries.

Combining a background in the physical sciences with international business development, Mr. Aspleaf is experienced in developing and managing complex, large-scale projects, involving investments in water, waste water, solid waste, transport, and energy-related infrastructure.

Mr. Aspleaf possesses a profound knowledge of the **Ukrainian business environment**, in particular related to infrastructure investments. This includes extensive experience with **feasibility studies**, **procurement**, **tendering procedures**, and **project management** particularly within the framework of **FIDIC** contract administration.



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