

OVERSEAS PROJECTS

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AKTOR is an international highly diversified company focused on Infrastructure, Building, Industrial, MEP, Solar Power Construction, EPC and Concession Contracts, Facility and Project Management.

VISION:

International, diversified contracting company

MISSION:

Sustainable projects to satisfied clients

STRATEGY:

Targeting long-term balanced growth

International player with presence in more than 20 countries, implementing all projects under high level HSEQ standards.

Areas of expertise



Corridor X— Construction of section Demir Kapija to Smokvica

In This Issue

- Highways / Railways / HEPP / Industrial projects in Balkans
- Water Treatment Plants
- Solar Projects
- Solid Waste Treatment Plant
- Facility Management



ALBANIA: Tirana Elbasan Highway

ALBANIA

Tirana Elbasan Highway

The motorway is one of the most important roads in Albania since it will connect the industrial city of Elbasan to the city of Tirana and therefore to the city and the port of Durres. It is expected to constitute, in the future, part of the central road axis of Albania that will connect Tirana to Elbasan, Berat and Tepelene.

The new highway is a Dual carriageway 2x2 lane motorway (platform width 25m) of a length of ~11km for **Segment I** i.e. the section between the Tirana suburb of Sauk and the entrance to Krabbe Tunnel **plus** a length of ~13km for **Segment III** i.e. the section between the exit to Krabbe Tunnel and the north suburbs of Elbasan. Both segments include significant structural and geotechnical works.



ALBANIA: Krabbe Tunnel

AKTOR has also constructed **Segment II** Krabbe Tunnel; a twin bore tunnel, 2.5km per branch, including excavation with the NATM methodology, final lining and modern state-of-the art M&E installations.

Rrapun HEPP

Small Hydropower Project located at the downstream end of river Rrapun, close to the town of Librazhd, approx. 20 km E-NE of Elbasan in Albania.

It has **two intakes**. The two discrete water way branches conduce to a common waterway, conveying water through a tunnel to the power station, located at the right river bank of the river Rrapun.

The **Power House** is equipped with three identical Francis turbines with nominal flow of $9 \text{ m}^3/\text{s}$ each. The power plant is to operate connected to the Albanian grid, in parallel with other power plants, with no obligations for black start and frequency control.



ALBANIA: Rrapun HEPP

TURKEY

Izmir WWTP

Design and build of the sludge digestion and drying plant in an existing Waste Water Treatment Plant (WWTP) which is located at Cigli area in Izmir, Turkey.

In particular the project comprises of the anaerobic digesters (4 x 15,000m³), where the sludge produced in the WWTP is digested and biogas is produced, as well as of the drying plant, of a capacity of 800 ton/day where digested sludge is dried.

Following drying process, sludge is pelletized.



TURKEY: Sludge Digestion and Drying Plant in the Izmir WWTP

BOSNIA HERZEGOVINA

Mostar WWTP



Construction of the Wastewater Treatment Plant of 100.000 equivalent population and treatment capacity and with 28.000 m³/d hydraulic load at the area of Mostar, in Bosnia – Herzegovina.



The wastewater treatment consists of inlet works, biological treatment, tertiary treatment and sludge treatment (thickening, anaerobic digestion, dewatering) skimming.

BiH: Mostar WWTP



SERBIA: E-80 Bancarevo to Crvena Reka

E75 Motorway Project

Srpska Kuca to Donji Neradovac

Construction over a length of 8km of a full profile motorway (27.4m wide) with a speed of 120 km/h plus local road network.

It includes bridges/overpasses, culverts, water stream regulations, drainage and environmental works, M&E and telecommunications works and traffic furniture.

SERBIA

E80 Motorway Projects

Construction of E-80 Motorway, part of the European Motorway Network and refers to the Serbian region from Nis up to the Bulgarian borders.

Sections:

- **Crvena Reka to Ciflic.** ~12.5km long. A dual carriageway with two lanes of traffic in each direction (total width 28,40m). The project includes the construction of bridges, overpasses, hydraulic works, drainage works, landscaping, electrical and lighting works, road signaling works, re-design of traffic arrangements, as well as telecommunications works.
- **Bancarevo to Crvena Reka :** ~13 km long. A dual carriageway with two lanes of traffic in each direction 10.7m wide, a median divider island 4m wide and two haunches of 1.5m (total width 28,40m). The project includes the construction of bridges, overpasses, hydraulic works, drainage works, landscaping, river bed rearrangements, electrical and lighting works, road signaling works, re-design of traffic arrangements, as well as telecommunications works.
- **Stanicenje – Sarlah - Pirot (east):** ~16.65 km long. The scope of works includes earthworks, road drainage works, slope protection works, culverts, waterstream regulation works, 1 twin bore tunnel, pavement construction, telecommunication installations, traffic equipment, noise barriers and landscaping of the highway area. A toll station and a service centre are also part of this contract's scope of works.



SERBIA: E75 near Vranje

SKOPJE

Corridor X - Motorway

Section Demir Kapija to Smokvica

Construction of 28.2 km of new dual carriageway, as part of the Pan-European Transport Network.

It includes two twin tunnels of a total length of 4.5 km, 6 major river bridges/ viaducts, 2 interchanges and 12 overpasses/ underpasses.



Corridor X—Construction of section Demir Kapija to Smokvica, B4



Corridor X—Construction of section Demir Kapija to Smokvica, B1

QUOTE

*of the
representative of
one of the funding
banks (June 2015)*

*.... very pleased to
see the progress on
this project which is
very good by any
standard*



ROMANIA: DN18 Baia Mare—Sighetul Marmatiei

ROMANIA

Motorway Projects

Romania possesses a vast road network. European and other funds have been used to improve it or build new speedier infrastructure. The Romania branch of AKTOR SA is being heavily involved in few projects. They inter alia include rehabilitation works on national (DN) and local roads for the following:

Sections:

- **DN17 BISTRITA NASAUD/ SUCEAVA COUNTY** ~39km long. The project includes protection and relocation services, road works, bridges and overpasses, railway level crossings, electromechanical works and environmental works.



- **DN6 DROBETA TURNU SEVERIN - LUGOJ** ~44.5 km long. The project includes earthworks, road-works, bridges and overpasses, level crossings, electromechanical works and environmental works.

- **DN18 BAIA MARE - SIGHETUL MARMATIEI** road rehabilitation consisting inter alia of earthworks and pavement works , culverts and drainage, improvement of junctions, miscellaneous works, bridges (including new bridges as well as repair and rehabilitation of existing bridges), street lighting.

Bacau WWTP

Following the success story of the Bucharest Sewage Treatment Plant (treatment capacity of about 1.75 million equivalent population) this project involves the design and build of the Wastewater Treatment Plant of 200.000 equivalent population.

The wastewater treatment consists of inlet works, biological treatment, sludge treatment (thickening, anaerobic digestion, dewatering) and co-generation unit.



ROMANIA: Bacau WWTP

Bucharest

Inner Ring Road

Object 7: Extension of the existing Bucharest ring road via the construction of the part between DN7 and DN1A, Romania

This design and build project consists of road works, construction of various technical works, construction of drainage networks, improvement of intersections / overpasses with railway lines, various works relating to the railway such as parallel roads, parking lots, retaining walls etc., road signalling, construction of bridges, electromechanical works and environmental work.

The total length of the extension is 2.7km, with four lanes in total, two lanes in each direction of 2.50m width each.



ROMANIA: Bridge of Object 7

Railway Project

Micasasa to Coslariu

The project includes rehabilitation / upgrading of rail infrastructure for a total length of 36.6 km. The project will ensure maximum speed of 160 km / h for passenger trains and 120 km / h for freight, and includes : earthworks, including slope stabilisation 7 new and rehabilitated bridges, 52 new and rehabilitated culverts, railway superstructure, various civil and M&E works.



FACILITY Management

NDIA units

Services provided:

For facilities within the New Doha International Airport (NDIA) in Qatar AKTOR FM is providing on a 24/7/365 basis including a Help Desk function:

- Maintenance (Preventive, Corrective, Predictive)
- Cleaning & Security services
- Waste Management services
- Landscaping

to the following facilities:

- Aircraft Maintenance Hangar
- Emiri Hangars C & D
- Duty Free Warehouses, Staff Access & Car Rental Facilities
(see s



AKTOR FM (www.aktorfm.gr) was founded in 2008, aiming to play a key role in the Greek market in the **Operation, Maintenance and Facilities Management industry for Buildings and Infrastructures**.

We deliver efficient Facility Management to governmental and commercial sector organizations, we emphasize on customized and responsible service and we focus on cost-effective approaches, which allow us to provide technology-enabled solutions while keeping the cost at low levels.

We provide smart, innovative and sustainable property & facilities management solutions for retail, healthcare, education, hospitality and corporate clients.

AKTOR FM manages facilities regarding their operation, supervision, auditing, preventive maintenance, failures and corrective work. In addition, we are capable of offering total warranty contracts which cover the whole installation, to undertake refurbishment and renovation works and to offer high standard cleaning and security services.

AKTOR Facility Management also invests in the sector of **Efficient Energy Management**, by offering from day one to all of our clients -regardless of their size - services concerning **energy saving and sustainability**, through our energy auditors and consultants.

Lukoil Neftochim Burgas Refinery

It involves the construction of :

- a Hydrodesulphurization and Dearomatization unit HDS-HDA (XO-5),
- a Gasoline Desulphurization - Prime G (XOB-1)

It also includes

- Civil works
- Equipment erection: 3.200 tons
- Supply of material, fabrication and erection of steel structures of Ca 2.300 tons
- Piping made of Carbon steel, Stainless steel, Alloy steel in accordance with PED (97/23/EC)
- Electrical and I/C erection works (total cable length 450km)
- Insulation: for 35.000 m²
- Pre-commissioning, Commissioning and Start-up activities for both units



BULGARIA: Lukoil Burgas Refinery

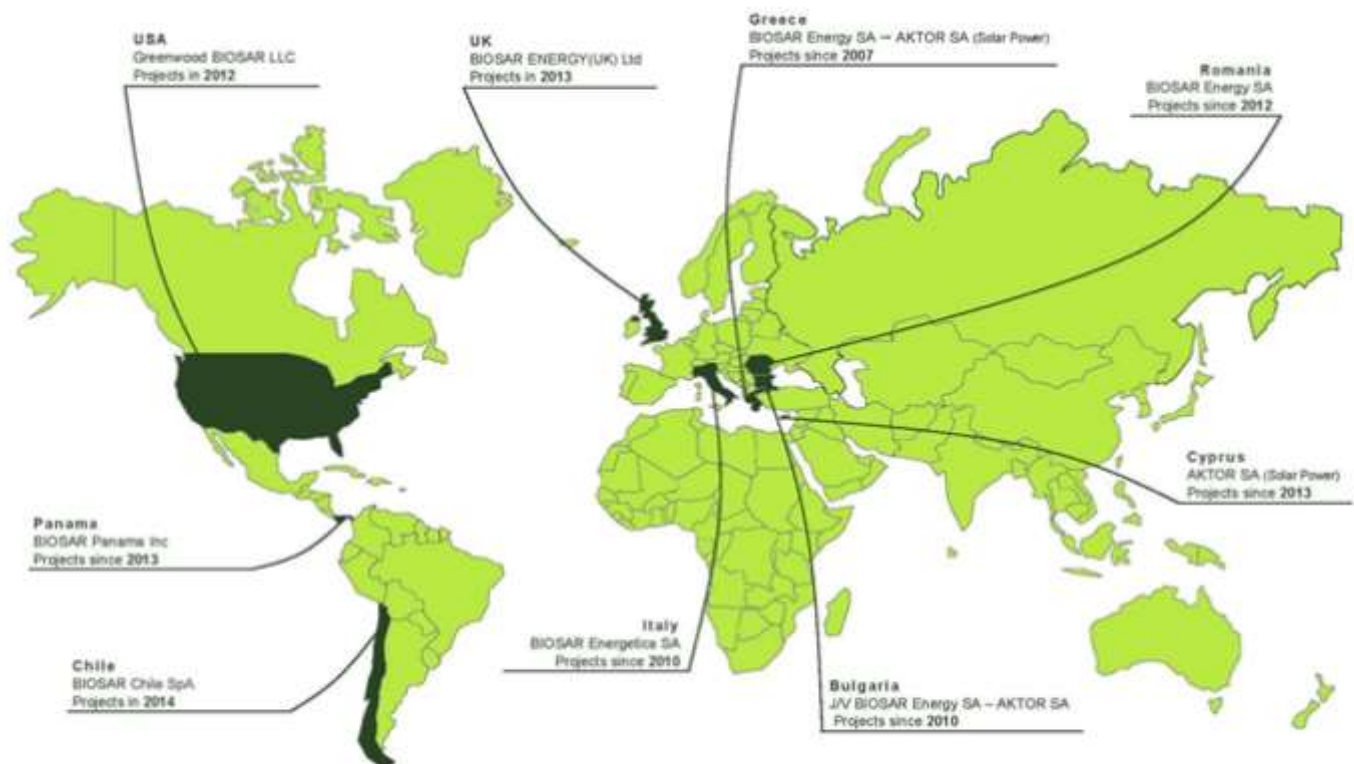
BULGARIA

Plovdiv Opera

The upgraded building is designated to accommodate all of its initial functions as well as new ones such as offices, shops, multifunctional spaces and recreation. The building is divided in three zones, the entrance with the foyer (developed in four levels and a basement), the theatre hall (developed in four levels) and the stage (developed in six levels).



SOLAR Projects



Worldwide presence

AKTOR through its subsidiary **BIOSAR** (www.biosar.gr) is specializing in the engineering and construction of medium and large scale photovoltaic (PV) grid connected systems. More specifically we focus on the design, supply, installation and commissioning of PV projects through mainly turn-key contracts.

Basic PV equipment of a **Solar Power Plant** includes PV panels, inverters, mounting systems, switchboards, DC and AC cabling, lightning protection and perimeter grounding.

An extensive **additional set of services** are offered to the Clients including preparation of technical studies (feasibility study, socioeconomic analysis and implementation study) and the execution of engineering works (topo plan, soil investigations, excavation works, lodge installation, mounting structures fastening and site fencing).

Past and current projects cover a wide range of countries including:

- **Balkans (Greece, Bulgaria, Romania) & Cyprus**
- **Italy and UK**
- **United States of America**
- **Latin America (Chile, Panama)**



ITALY

Borgo Sabotino

Engineering, Procurement, Construction & Commissioning of a **11.00MWp Photo-voltaic Power Park** in Borgo Sabotino, Latina (Italy) FOR Volteo Energie SpA (Kinexia SpA).

Sinco Solar panels on fixed mounting structures and SMA inverters were installed. The construction was completed in 4 months.



ITALY: Borgo Sabotino PV

ETHIOPIA

Addis Ababa WWTP

Design and construction of the civil and electromechanical works for the **Waste Water Treatment Plant in "Kaliti"** region of Addis Ababa. The final effluence can be used for irrigation purposes.

The wastewater treatment consists of preliminary treatment (coarse and fine screening, grit removal), USB reactors, trickling filters, tertiary treatment and sludge treatment (sludge drying beds). Septic Sewage Sludge Reception System and Latrine Sludge Reception and Pretreatment System are also included.



BULGARIA

Solid Waste Treatment Plant

AKTOR in JV with affiliate technology specialist **HELECTOR** has recently completed the design and construction of **Phase II** of the project “**Integrated system of Solid Waste Treatment Facilities of SOFIA Municipality**” which will be inaugurated in mid September 2015.

It refers to a **Mechanical—Biological Treatment (MBT) plant** for processing waste and for the production of refuse derived fuel at the Sadinata site, including all necessary infrastructure, buildings, equipment, mobile plant and ancillary items necessary for its effective operation.

It will receive and process up to **410.000 tonnes per** annum of residual municipal solid waste which shall be treated to:

- Recover recyclable materials (paper, glass, plastics and metals)
- Produce a Refuse Derived Fuel (RDF) fraction
- Produce a compost-like output (CLO)

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BULGARIA—Sofia Solid Waste Treatment Plant