AD ESM

Public service obligation and price surge

November 2021
Energy crisis and public service

- AD ESM – state owned company
- Fixed electricity price
- Stability in energy price for households
- Energy crisis measures:
  - Activation of third block of Mining power complex “Bitola”
  - Mining power complex “Oslomej”
  - Activation of TEC Negotino - oil-fired power plant
  - Import of coal
- Future renewable energy plans
## Time plan

<table>
<thead>
<tr>
<th>Project</th>
<th>Installed capacity</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
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<tbody>
<tr>
<td>PVPP Oslomej 1</td>
<td>10 MW</td>
<td>•Technical and environmental consultant, February 2019</td>
<td>•Technical and environmental consultant, December 2021</td>
<td>•Project implementation, December 2021</td>
<td>Commissioning, January 2022</td>
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<tr>
<td>PVPP Oslomej 2 PVPP Bitola 1</td>
<td>10MW 20MW</td>
<td>•Technical and environmental consultant, 2020</td>
<td>•Technical due-diligence and Basic design, October 2021</td>
<td>•Technical specification for EPC, December 2021</td>
<td>Tendering procedure for EPC, March 2022</td>
<td>Tendering procedure, May 2023</td>
<td>Tendering procedure, August 2023</td>
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<td>PVPP Bitola 2 PVPP Bitola 3</td>
<td>60MW 100MW</td>
<td>•No Objection from KfW to PQ Documents</td>
<td>•Submission of proposals and opening of technical proposals</td>
<td>•Submission of proposals and opening of technical proposals</td>
<td>•Submission of proposals and opening of technical proposals</td>
<td>•Feasibility study</td>
<td>•Project implementation</td>
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<td></td>
<td></td>
<td>•Tender Notice (PQ)</td>
<td>•Evaluation of technical proposal</td>
<td>•Evaluation of technical proposal</td>
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<td>•Loan agreement</td>
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<td></td>
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<td>•First Draft TOR</td>
<td>•No Objection from KfW to Tender Documents</td>
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<td>•No Objection from KfW to Tender Documents</td>
<td>•Project design</td>
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<td>•Evaluation of PQ</td>
<td>•Final draft of TOR and RIP</td>
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<td>•Final draft of TOR and RIP</td>
<td>•Contract in force</td>
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<td>•No Objection of PQ Evaluation</td>
<td>•Publication of PQ Results on GTAI and TED</td>
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<td>•No Objection of PQ Evaluation</td>
<td>•Informing pre-qualified and disqualified applicants</td>
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<td>•Invitation to consultants to submit offer</td>
<td>•No Objection of TOR and RFP</td>
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**Notes:**
- **PVPP Oslomej 1:**
  - Technical and environmental consultant, February 2019
  - Technical due-diligence and Basic design, March 2019
  - Tendering procedure for EPC, March 2019
  - Evaluation and selection of EPC, May 2019

- **PVPP Oslomej 2 PVPP Bitola 1:**
  - Technical and environmental consultant, 2020
  - Technical due-diligence and Basic design, October 2021
  - Tendering procedure for EPC, March 2022
  - Evaluation and selection of EPC, May 2022

- **PVPP Bitola 2 PVPP Bitola 3:**
  - No Objection from KfW to PQ Documents
  - Tender Notice (PQ)
  - First Draft TOR
  - Evaluation of PQ
  - Final draft of TOR and RFP
  - No Objection of TOR and RFP
  - Invitation to successful bidder for negotiations
  - Completion of Contract negotiations
  - Information to bidders of Final Tender result & award of contract
  - Contract in force

**Sources:**
- ESM
- www.efem.com.mk
<table>
<thead>
<tr>
<th>Project</th>
<th>Installed capacity</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
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<th>2029</th>
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<tr>
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<td>• Submission of proposals and opening of technical proposals</td>
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<td>• Loan agreement</td>
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</table>
| Wind Park Bogdanci    | 15MW               | • Inception phase             | • Geological and Geotechnical Survey  
|                       |                    |                               | • Preparation of Conceptual Design  
|                       |                    |                               | • Review of ESIA, establishing of ESMP  
|                       |                    |                               | • Review of design and cost estimation  
|                       |                    |                               | • PQ documents preparation and launching  
|                       |                    |                               | • PQ evaluation (draft report)  
|                       |                    |                               | • Program: Testing of cable network  
|                       |                    |                               | • Tender 1 and 2 preparation  
|                       |                    |                               | • Tender Period start Tender 1  
|                       |                    |                               | • Tender Period start Tender 2  
|                       |                    |                               | • Tender 1 evaluation  
|                       |                    |                               | • Contract award Tender 1  
|                       |                    |                               | • Tender 2 evaluation  
|                       |                    |                               | • Contract award Tender 2  
|                       |                    |                               | • Kick-off meetings with Lot 1 Contractor  
|                       |                    |                               | • Review of Lot 1 Contractor's Building Permit Design  
|                       |                    |                               | • Factory Acceptance Testing (FAT)  
|                       |                    |                               | • Kick-off meetings with Lot 2 Contractor  
|                       |                    |                               | • Review of Lot 2 Contractor's Building Permit Design  
|                       |                    |                               | • Transport of main components  
|                       |                    |                               | • Lot 1 construction phase finished  
|                       |                    |                               | • Lot 2a (access roads and hardstands) construction phase finished  
|                       |                    |                               | • Lot 2b (MV cabling and substation extension) construction phase finished  
|                       |                    |                               | • Commissioning Tender 1  
|                       |                    |                               | • TOC Lot 1 / DNP start  
|                       |                    |                               | • TOC Lot 2a (access roads and hardstands) / DNP start  
|                       |                    |                               | • TOC Lot 2b (MV cabling, substation and grid connection) / DNP start  

Thank you for your attention!