



# **The CDM Project Implementation Cycle**

## **Libyan Wind Power CDM-Projects**

CDM Workshop

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Mag. Gerald Dunkel

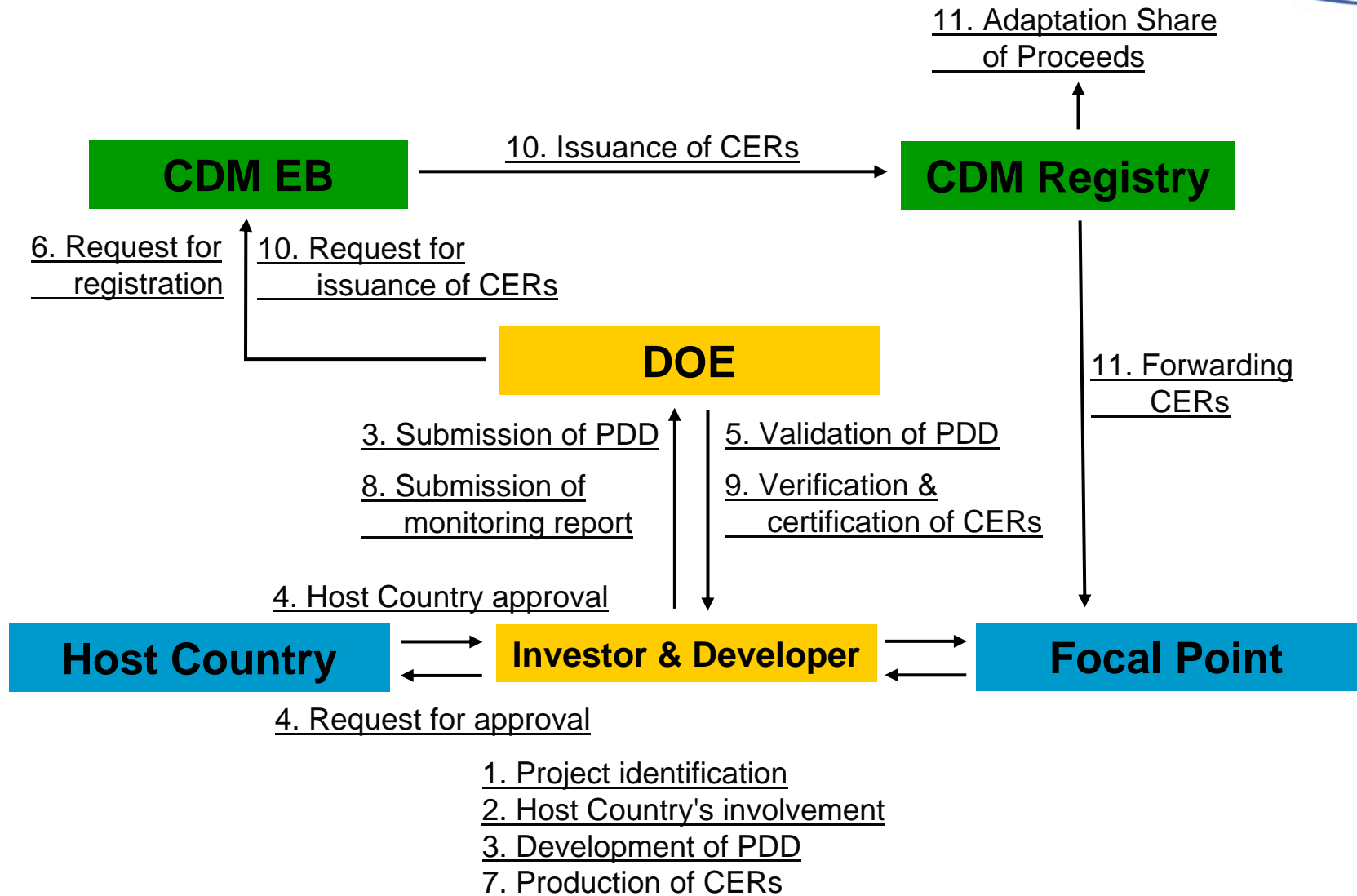
Tripoli (Libya)

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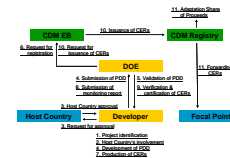


- CDM Project Cycle
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- Time Schedule of 60 MW Wind Power Project

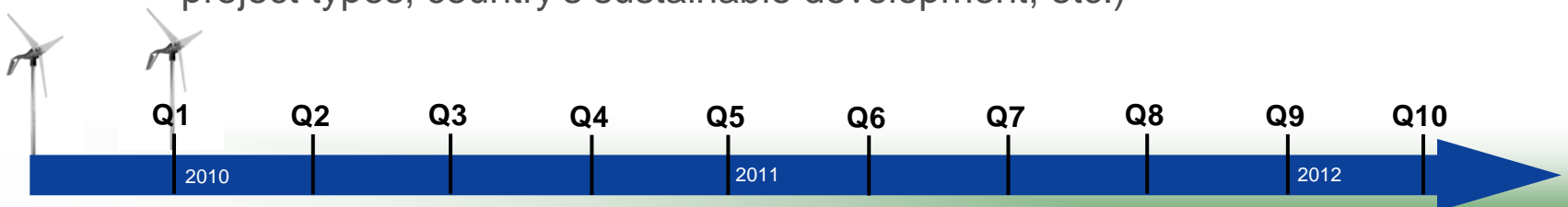
# CDM Project Cycle – Diagram



# 1. Project Identification



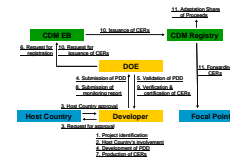
- Check feasibility of project activity
  - Host Country-specific research (e.g. legal framework, energy situation, CDM procedures), initial conditions (e.g. project site, wind measurement data, infrastructure, grid access), risk management, financing etc.
- Check CDM eligibility criteria
  - Additionality: A project is additional if in its absence the proposed voluntary measure would not be implemented.
  - Involvement of stakeholders
  - Project meets host country's eligibility criteria (support of specific project types, country's sustainable development, etc.)



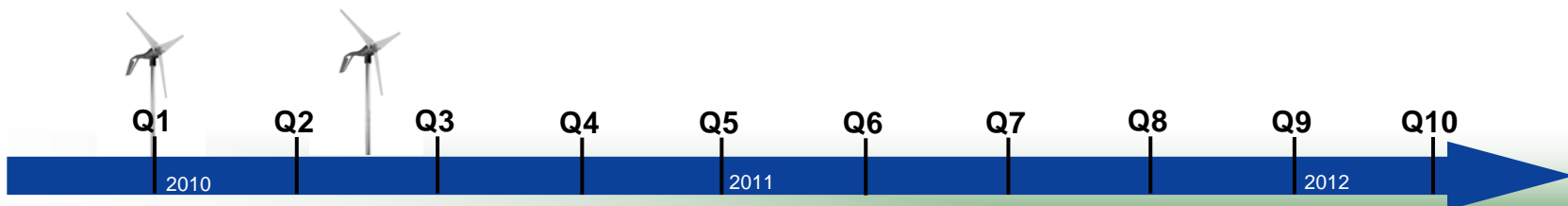




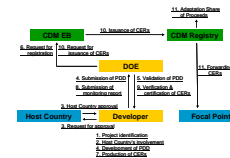
# 3. Development of PDD II



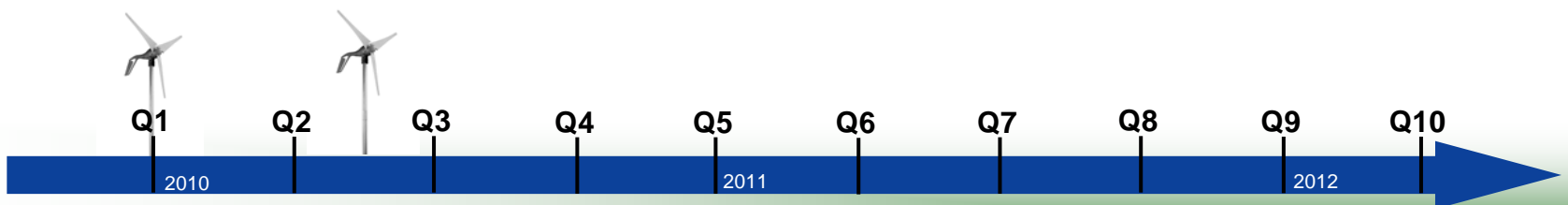
- A baseline methodology describes the approach to estimate the emissions that would have been created in the most plausible alternative scenario.
- The design of a new baseline methodology is not necessary as ACM0002 (“Consolidated baseline methodology for grid-connected electricity generation from renewable sources”) is applicable.
- Critical elements of a PDD:
  - Selection of an applicable, approved baseline methodology.
  - Assessment & demonstration of additionality, which is most critical issue for project acceptance and the project will be refused, if additionality is not proven.



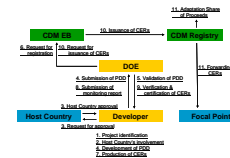
# 3. Development of PDD III



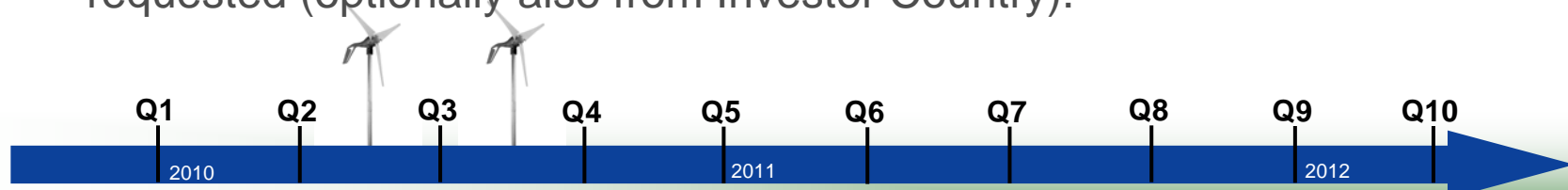
- Among others the following information is needed to develop the PDD properly:
  - Wind Park Project Site
  - Wind measurement & analysis of data
  - Park design (installed capacity, # of turbines etc.)
  - Access to power grid
  - CO<sub>2</sub> emission factor of Libyan Power Grid (according to the “Tool to calculate the emission factor for an electricity system”; initial estimation: ~ 0.8 t CO<sub>2</sub>/MWh<sub>el</sub>)
  - Monitoring concept (e.g. How to measure total electricity generated and net electricity generated and supplied to the grid; etc.)



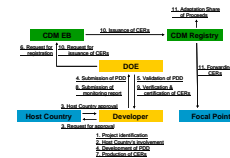
# 4. Request for Host Approval



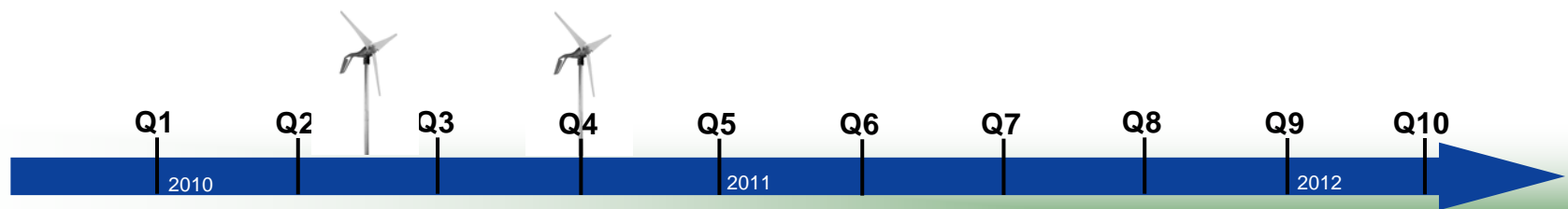
- Host Country's draft support of proposed project may be expressed by Letter of No Objection/ Letter of Endorsement.
- Host Country's final support of proposed project is expressed by the Letter of Approval (LoA), which is issued by the DNA.
- The LoA is a requirement for CDM registration:
  1. the Host Country has ratified the Kyoto Protocol;
  2. the Host Country's participation is voluntary; and
  3. the project is contributing to country's sustainable development.
- At the latest for project registration the LoA from Host Country is requested (optionally also from Investor Country).



# 5. Validation of PDD

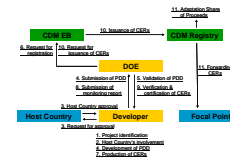


- Validation means the independent evaluation of the PDD against the UNFCCC’s requirements and determines, if the project is eligible to be registered as a CDM project.
- Validation check:
  - Meeting UNFCCC’s participation requirements;
  - Additionality of the GHG emissions reductions;
  - Application of baseline and monitoring methodologies;
  - Environmental impact analysis or assessment;
  - Stakeholders’ comments.
- The PDD is validated by an independent DOE.



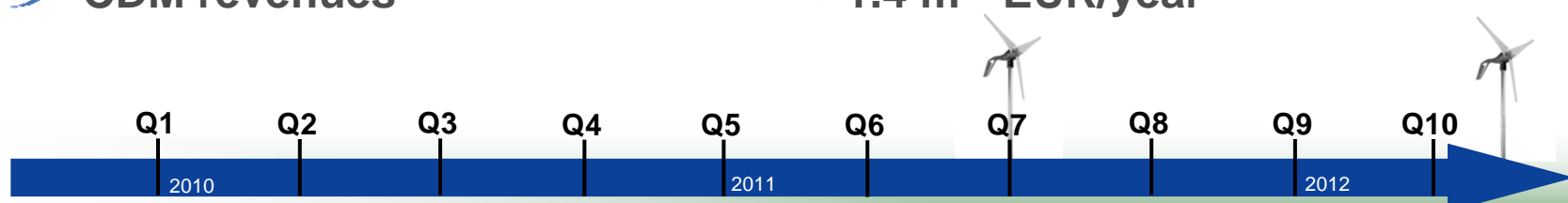


# 7. Production of CERs



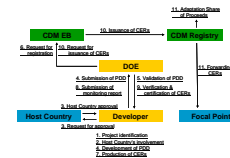
Estimated emission reductions and revenues on the basis of a 60 MW wind farm:

- Installed capacity 60 MW
- Annual operating hours ~ 2,900 h
- Generated electricity ~ 174,000 MWh
- Estimated emission factor ~ 0.8 t CO<sub>2</sub>/MWh
- **Emission reductions ~ 140,000 t CO<sub>2</sub>/year**
- Price per CER ~ 10 EUR
- **CDM revenues ~ 1.4 m EUR/year**

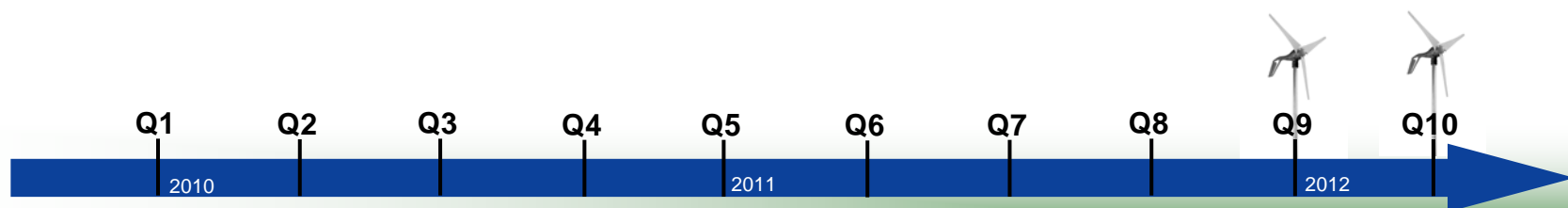




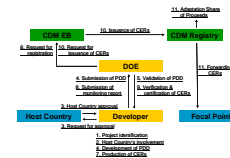
# 9. Verification & Certification



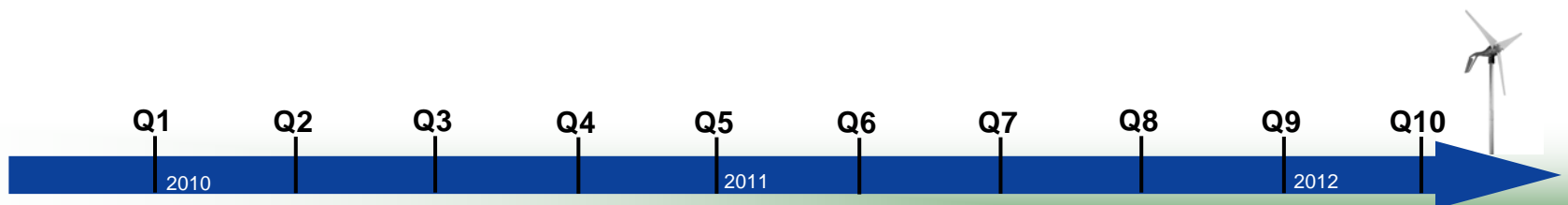
- Verification is a periodic independent review and *ex post* determination of data collected and monitored emission reductions over a defined period of time (= verification period).
- Initial verification is a voluntary measure to assess the likelihood that a project activity will be able to generate emission reductions.
- A DOE may only perform either validation or verification and certification in respect of one CDM project activity.
- Certification is the formal written confirmation by the DOE that the emission reductions, which are set out in the verification report, were actually achieved.



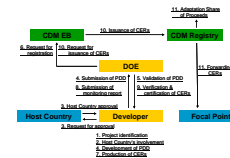
# 10. Issuance of CERs



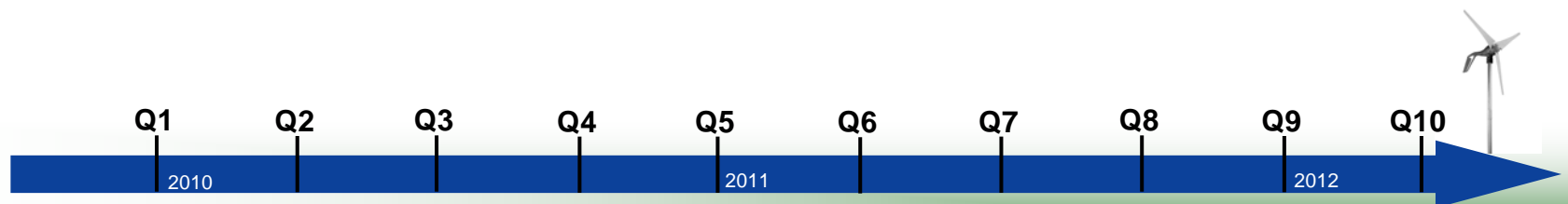
- The certification report, prepared and issued by the DOE, also constitutes a Request for Issuance.
- Issuance refers to the creation of CERs equivalent to the number of emission reductions, which have been generated, verified and certified in respect of a CDM project activity.
- UNFCCC Completeness Check (actual 8 – 12 weeks)
- Monitoring, certification and verification report are published for 15 days.
- CERs are issued into the pending account of the CDM Registry. The focal point is notified that CERs have been issued.
- SoP Fee (share of proceeds for administration): 0.1 / 0.2 US\$/CER



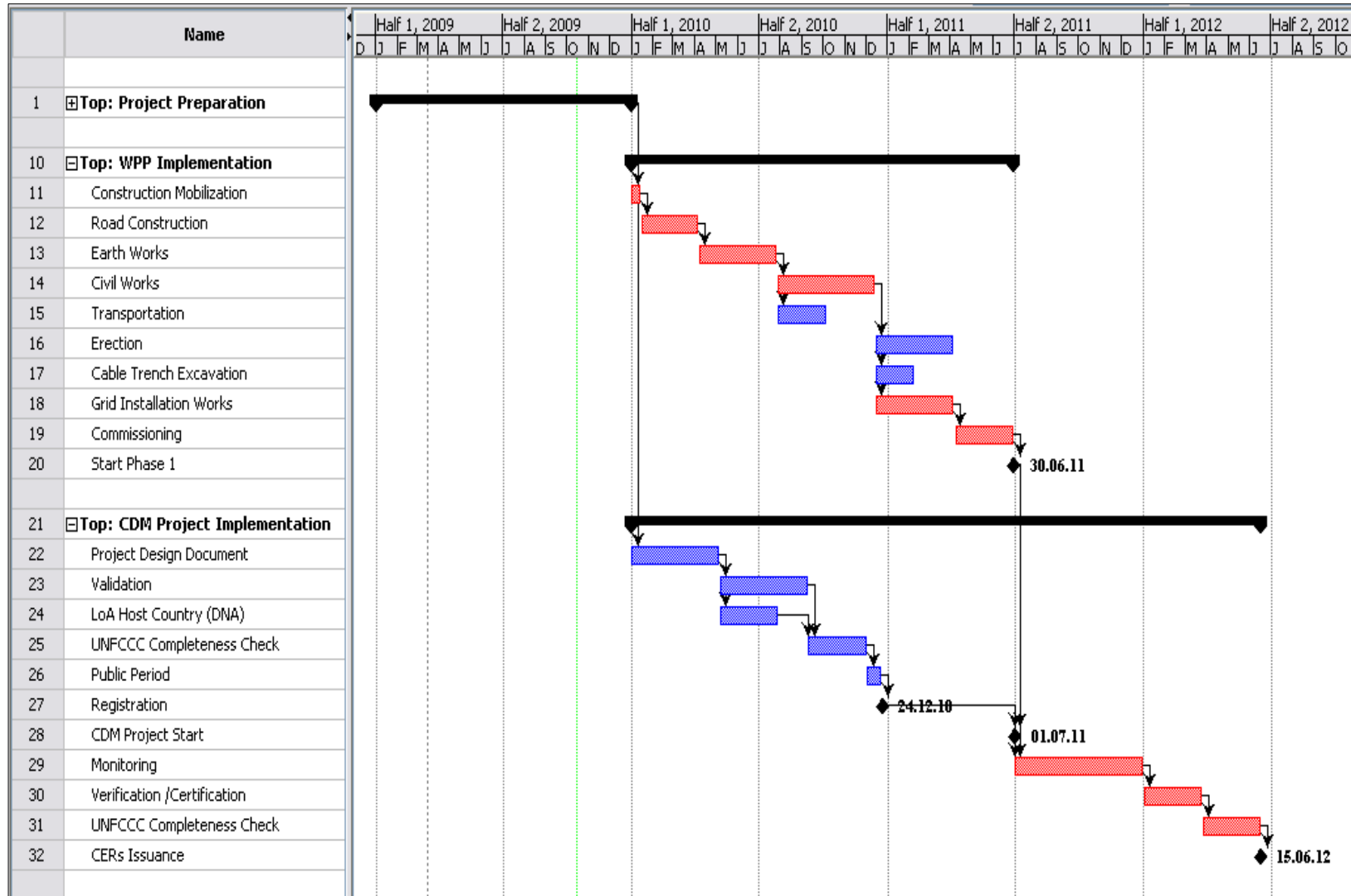
# 11. Forwarding of CERs



- Forwarding can only occur once CERs have been issued into the pending account and a request for forwarding has been received by the CDM registry administrator.
- CERs available: CER issued (100 %) less than 2 % for UNFCCC adaptation fund.
- CERs are forwarded by the CDM registry administrator to the accounts specified in the forwarding request.
- This step is repeated for each CER forward to PP for every verification period.



# Time Schedule of Wind Power Project





# Thank you for your attention!

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