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Aspects regarding project financing of renewables (wind farms focus)

Cosmin Stăvaru

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1. Status of renewables in Romania
2. Outline of project finance structure
3. Bankability of renewable projects

1. Current status of renewables in Romania

- proportion of renewables in the national energy production is around 0.5%;
- the overwhelming percentage of renewable projects under development are wind projects – approx. 7,000 MW in an advanced stage of permitting;
- wind projects have certain competitive advantages compared to other renewable projects:
  - ✓ mature technology - less technological risks;
  - ✓ reduced capital and operational costs (e.g. when compared with solar or biomass);
  - ✓ high wind potential in Romania.
- currently, Romanian wind market is at the stage when several significant projects reached or are about to reach the “ready to build” stage and, thus, need to obtain construction financing;
- the preferred financing structure by developers is the classic project finance structure.

2. Outline of project finance structure

Typical project finance structure

- project finance is a type of bank financing which relies rather on project cash flows than on sponsors' balance-sheet;
- key features of project finance:
  - ✓ project is financed through a mix of sources:
    - ➢ equity provided by project sponsors;
    - ➢ debt provided by commercial banks (the actual project finance);
    - ➢ equity or debt provided by governmental sources - export/import credit agencies and multilateral financing institutions (EBRD, EIB, IFC etc);
    - ➢ national or EU grants.
  - ✓ syndication very usual for large projects - ordinary syndicates, parallel loans, A/B loans;
  - ✓ banks provide usually non-recourse loans secured with all project assets, including revenue-generating project contracts;
  - ✓ project is developed by a SPV without previous track history and which will own solely the project assets.

2. Outline of project finance structure

Benefits of project finance

- the project is not on the parent's balance-sheet;
- better leveraging of available capital;
- capitalises the benefits of a strong regulatory environment;
- structure of the project is made on a deal-by-deal basis allowing flexibility;
- involvement of banks increases project development standards - the lender would act as a supervisor closely monitoring any derail and imposing contractual constraints for a sound development.

2. Outline of project finance structure

Difficulties in raising project finance

- lenders more cautious in assuming project finance risks;
- increased financing costs due to limited liquidity of the market;
- currency risk and country risk;
- selective lending - only the best projects obtain project financing.

3.1 Bankability – general remarks

Banks are looking for:

- stability - the project has a stable cash-flow;
- predictability - the project operation is predictable on long term;
- certainty - the risks of project failure are minimised;
- value - projects must produce value in terms of economic, social and environmental standards.

3.1 Bankability – general remarks

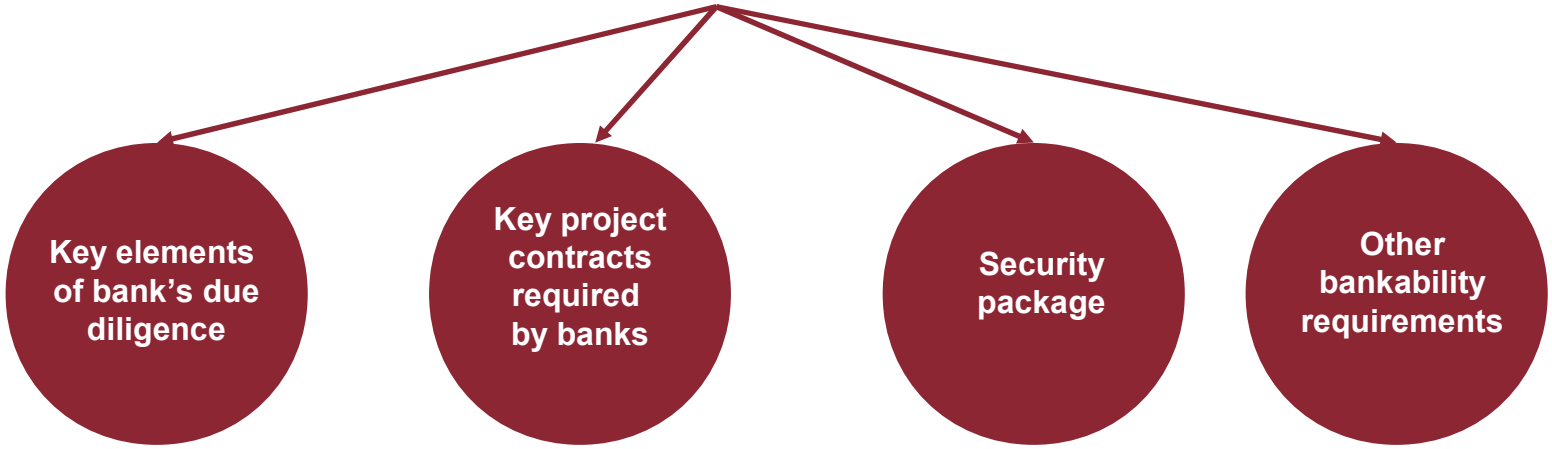
Bankability of renewable project is based on two pillars:

- project merits - is the project properly prepared for financing?
- legal framework merits - is the local legal framework fit for project financing?

3.2 Preparing a renewable project for financing

It is important that the project is developed from the very beginning considering the project finance requirements.

Also, in order for a project to be financed, it needs to attain a certain maturity stage (i.e. ready to build stage).



3.2 Preparing a renewable project for financing - due diligence

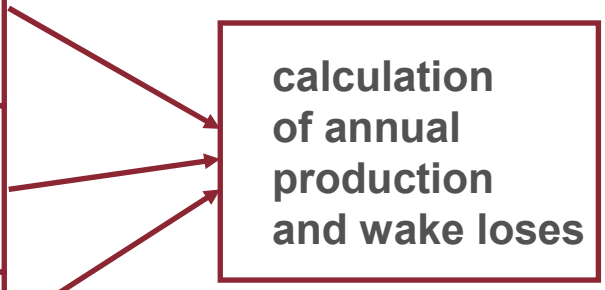
Legal due diligence:

- SPV status - project company must not have liabilities non-related to the project;
- title to project land and sufficiency of the land secured for the project development;
- grid connections secured;
- clean permitting process
  - ✓ **analysis of the location** - environmental restrictions (noise, natural protected areas etc), archaeological restrictions, restrictions related to proximity of public objectives: airports, military infrastructure, telecommunication interference, utilities networks, etc;
  - ✓ **conjunct analysis of the project permits and legal framework** governing administrative acts to determine the practical invalidation risks - domino effect, status of limitation, possible remedies

3.2 Preparing a renewable project for financing - due diligence

Technical due diligence

- ground conditions;
- grid connection issues;
- available and proposed infrastructure;
- environmental issues - Equator principles;
- reliability and quality of wind data collection collected by an independent and reputable wind surveyor;
- optimisation of the lay-out considering the characteristics of the project land and the proximity of other wind farm projects;
- turbines types - proven technology, operational costs, trademark notoriety.



3.2 Preparing a renewable project for financing

key project contracts

Key project contracts required by banks in a green certificates system

- construction and supply contracts:
  - ✓ EPC (engineering, procurement, construction) is preferred;
  - ✓ supply agreements for different parts and a BoP (balance of plant) agreement for the installation of the infrastructure (roads, cables etc) could be an alternative structure;
  - ✓ turbines supply and installation is usually done under a separate turbines purchase agreement by the turbines producer
- O&M (operation and maintenance) agreements during the project life;
- long-term power purchase agreements;
- long-term green certificates purchase agreements for a fix price;
- long-term supply agreements (e.g. for bio-mass projects).

3.2 Preparing a renewable project for financing

- Security package

Security interest required from the borrower

- mortgages and pledges over tangible assets (land, turbines, connection infrastructure);
- pledges over intangible assets: (i) bank accounts, (ii) revenues and (actual or potential) receivables from project agreements, (iii) green certificates and other assets/receivables;
- property and liability insurance covering the project assets and project operational risks and assignment to the lender of rights to insurance proceeds.

3.2 Preparing a renewable project for financing

- Security package

Additional guarantees by the sponsor:

- pledges over shares in the SPV;
- equity subordination;
- sponsor guarantee usually under the form of a cost over-run guarantee, comfort letter or corporate guarantee:
  - ✓ completion of the project/cost overrun;
  - ✓ capital contributions;
  - ✓ identified risks;
  - ✓ adverse changes (e.g. change of the legal framework).

However, usually such guarantees do not represent a form of security over sponsor's assets (non-recourse principle).

3.2 Preparing a renewable project for financing

- Security package

Third party guarantees - direct agreements:

- lenders demand the execution of direct agreements with certain major parties in the project;
- direct agreements allow the lender to “step in the shoes of the SPV” in order to prevent termination of key project agreement;
- practical and regulatory issues in obtaining direct agreements.

3.2 Preparing a renewable project for financing

- Other bankability requirements

- guaranteed cash flow projection for the entire duration of the financing plus a time reserve (usually 10-15% of the financing duration) and a DSCR > 1 (a DSCR of 1.40 is usual for wind);
- successful track record of the sponsors in the same industry;
- proven technology;
- sufficient equity.

3.3 Analysis of the legal framework

Renewables are expensive when compared to conventional sources so that they need a **legislative public support** to be able to compete with conventional sources.

Also, the legal framework must be **investor-friendly** in the sense of easing up the efforts of an investor to develop a project rather than creating artificial obstacles.

Another very important aspect of the legal framework assessment is whether it regulates/allows the creation of an **easy enforceable security package** for the banks.

Therefore, the project merits are analysed by lenders also in the broader context of the applicable legislative framework.

3.3.1 Public support - Investment support

Public subsidies

- EU funding - structural funds
  - ✓ Dedicated funds of approx. EUR 230 million for the period up to 2013
- Domestic funding - Environmental Fund
  - ✓ Dedicated funds of approx. EUR 100 million for the period up to 2011
  - ✓ Potential additional funds under the Green Investment Scheme financed from the sale of AAUs by the Romanian State

Additional support measures granted by Law 220/2008

- state guarantee of medium or long term loans;
- transport infrastructure and utilities necessary for the investment;
- access roads and adaptations of the existent infrastructure required for the investment.

3.3.1 Public support - Operational support

Promotion systems under Law 220/2008 (main points)

- **Quota system**
  - progressive TGC quota on the suppliers side up to 16.8% in 2020;
  - wind receives 2 TGC until 2015;
  - TGC price varies between EUR 27 and EUR 55 until 2015 with the minimum price of EUR 27 guaranteed until 2030.
- **Feed-in tariffs**
  - only for the small producers (under 1 MW installed power);
  - optional but not cumulative with TGC.

Additional incentives under Law 220/2008

- accelerated depreciation of equipment;
- reduction of tariffs and terms for the issuance of authorisations and licenses;
- priority access to the transmission system and priority for sale on the sport market;
- exemptions or clearances from tax on reinvested profits during the first 3 years of project operation;
- grants from the state budget for new employment positions.

3.3.2 Beyond financial incentives – the need for an investor - friendly legal framework

Reduce administrative barriers

- simplify the permitting process and create a one-stop shop system;
- reduce excessive environmental restrictions (e.g. Natura 2000);
- regulate an efficient expropriation procedure;
- establish an electronic land book system;
- regulate reasonable terms of validity for project permits (e.g. currently, grid connection permit has a quite short validity term and the renewal conditions are not clear).

3.3.2 Beyond financial incentives – the need for an investor - friendly legal framework

Regulating grey areas in legislation

- right to use the lands in the private property of local authorities;
- specific detailed legislation on construction of wind parks (special urban planning regulations, legal nature of the turbines, security regulation, etc.);
- clarifications to ensure predictability and stability of regulation concerning cancellation of permits/licenses;
- missing methodologies for calculating sharing of costs for grid connection between the investors and grid operator, on one hand, and between the investors connecting on the same grid, on the other hand;
- clarifications on the wind farms bearing the balancing responsibility and being dispatchable units.

3.3.2 Beyond financial incentives – the need for an investor - friendly legal framework

Grandfathering

- the incentives for wind energy in Romania are guaranteed for 15 years by Law no. 220/2008 but a new law could affect the current investments under the principle *tempus regit actum*;

- however, the proposed amendments to Law 220/2008 introduce the right of the investor to chose the most favourable legal framework safeguarding the grandfathering principle.

3.4 Bank financing of wind projects in Romania – difficulties and challenges

- banks prefer the feed-in tariff system over the quota system
- bankability issues derived from regulation of TGC under Law 220/2008:
  - ✓ price volatility
  - ✓ lack of off-take guarantee in case of TGC inflation
  - ✓ currency protection sufficiently secured?;
  - ✓ proposed amendments to Law 220/2008 may reduce bankability of renewable projects
- bankability issues related to grid connection and energy output balancing
  - ✓ grid connection is critical due to poor grid capacity overall Romania and concentration of most wind farms in Dobrogea area;
  - ✓ access to grid and priority for trading are guaranteed for renewables only to the extent the security of the grid is not affected;
  - ✓ As an rule, wind farms are economically responsible for forecasting and balancing their wind energy output, with the following consequences:
    - additional costs and uncertainties related to forecast and penalisation for imbalances;
    - the operation of a wind farm becoming difficult for producers others than power utilities.

3.4 Bank financing of wind projects in Romania – difficulties and challenges

- other bankability issues:
  - ✓ missing express legal provisions addressing the creation of security over turbines and TGC, but there is a modern legal framework governing pledges over tangible and intangible assets (Law 99/1999);
  - ✓ test of a clean permitting process more difficult in the context of grey areas in legislation partially mitigated by the increasing experience of the local authorities in dealing with wind farms issues;
  - ✓ need for a customised support scheme for certain renewable sources (e.g. biomass or solar);
  - ✓ choosing the appropriate contractual structure (e.g. EPC structure, owned land instead of rented land).

Thank you!

Cosmin Stăvaru
Partner
Bulboacă & Asociații SCA

Phone: (40-21) 408 8910
Mobile: (40) 722 178 464
Fax: (40-21) 408 8911
Email: cosmin.stavaru@bulboaca.com
Website: www.bulboaca.com

Bulboacă & Asociații SCA

UTI Business Center, 9th floor
31 Vasile Lascar Street,
District 2, 020492,
Bucharest, Romania

Phone: (40-21) 408 8900
Fax: (40-21) 408 8911
Email: office@bulboaca.com
www.bulboaca.com