



Taking Sustainable Energy to New Frontiers.



In Bulgaria by  
**Continental Wind Bulgaria EOOD**

**DEALING WITH AN INSECURE LEGAL  
FRAMEWORK**

# CONTINENTAL WIND PARTNERS - OVERVIEW



**Leading global wind developer with over 3,000 MW under development**

- Continental Wind Partners LLC (CWP) is one of the leading global developers of wind energy
- The company combines international experience with local commitment and has offices in all of the seven countries where it operates
- With more than 3,000 megawatts of capacity under development, CWP is one of the leading players in Europe and Australia



**Proven experience in all project stages**

- |   |  |
|---|--|
| <p><b>Securing land</b><br/><b>Wind analysis</b><br/><b>GIS and layout optimisation</b><br/><b>Environmental and building consents</b><br/><b>Contracting grid connection</b></p> | <p><b>Procurement of turbines and BOP</b><br/><b>Arranging project finance</b><br/><b>Negotiating construction contracts</b><br/><b>Construction management</b><br/><b>Operation</b></p> |
|---|--|



**Completed Europe's largest wind farm**

- CWP's Fantanele project in Romania, acquired by CEZ in 2008, is Europe's largest onshore wind farm
- With 240 turbines (GE 2.5xl) for a total capacity of 600 MW, the wind farm is an example of CWP's development and construction management capabilities



**Unmatched experience and track record in CEE**

- The company was established in 2007 and initially focused on the development of wind farms in Romania and Poland, but quickly expanded into other CEE countries
- With over 1 GW under development in the region, CWP is the largest and most experienced international developer present in CEE



**Expanding in other RE technologies**

- In 2011, CWP acted as commercial/project manager on behalf of a major utility company for the procurement and construction of a 5MW solar PV project
- In 2011, after 2 years of development, CWP in a consortium with AREVA & CS Energy won a \$300 million grant from the Australian government as part of the Australian Government's Solar Flagships Program. The 250 MW solar thermal gas hybrid project will be the largest of its kind in the world, with a total investment over \$1 billion

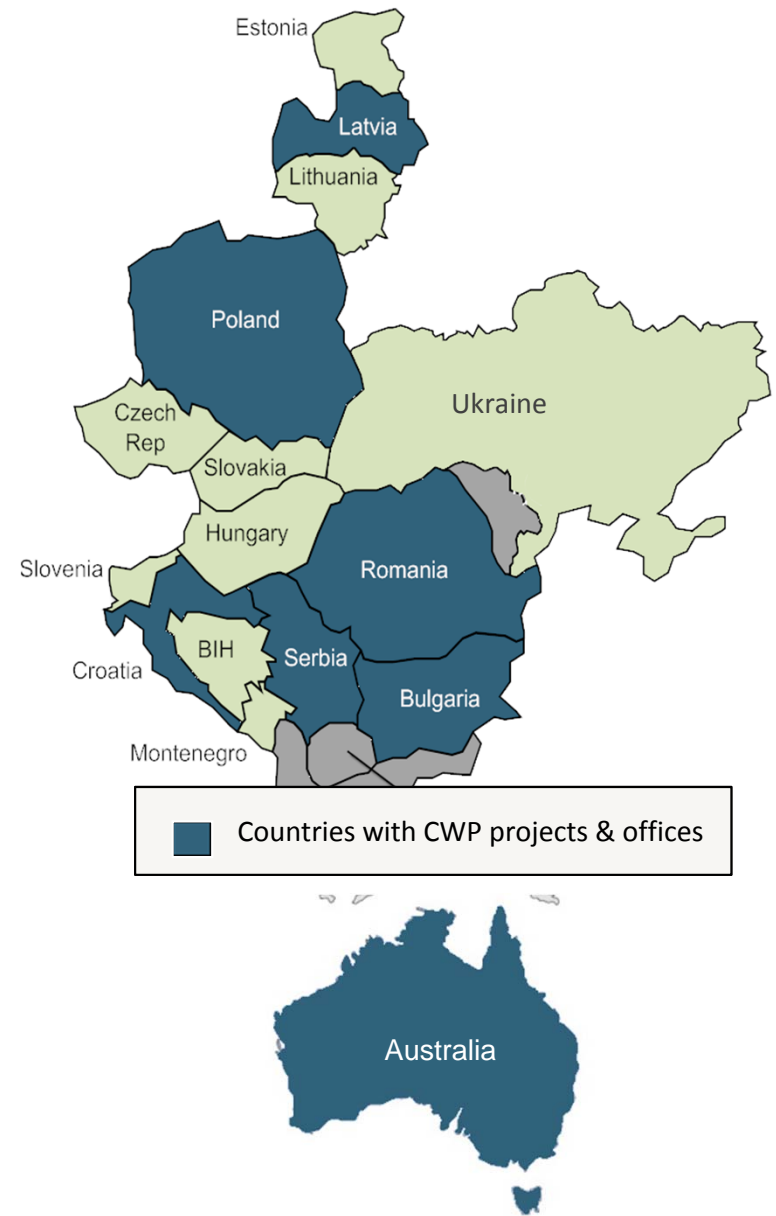
# CONTINENTAL WIND PARTNERS - OVERVIEW

## GLOBAL PRESENCE

*CWP's available pipeline of high-quality projects is more than 4 GW of capacity*

*Wind project sizes range from circa 90 to 300 MW*

*5 projects are late stage developments and will reach full permitting in the next year*



CWP Market Presence	
Poland	400 MW
Croatia	120MW
Romania	400 MW
Bulgaria	180 MW
Serbia	300 MW
Australia	3,000 MW

## REGULATORY AND INSTITUTIONAL BARRIERS

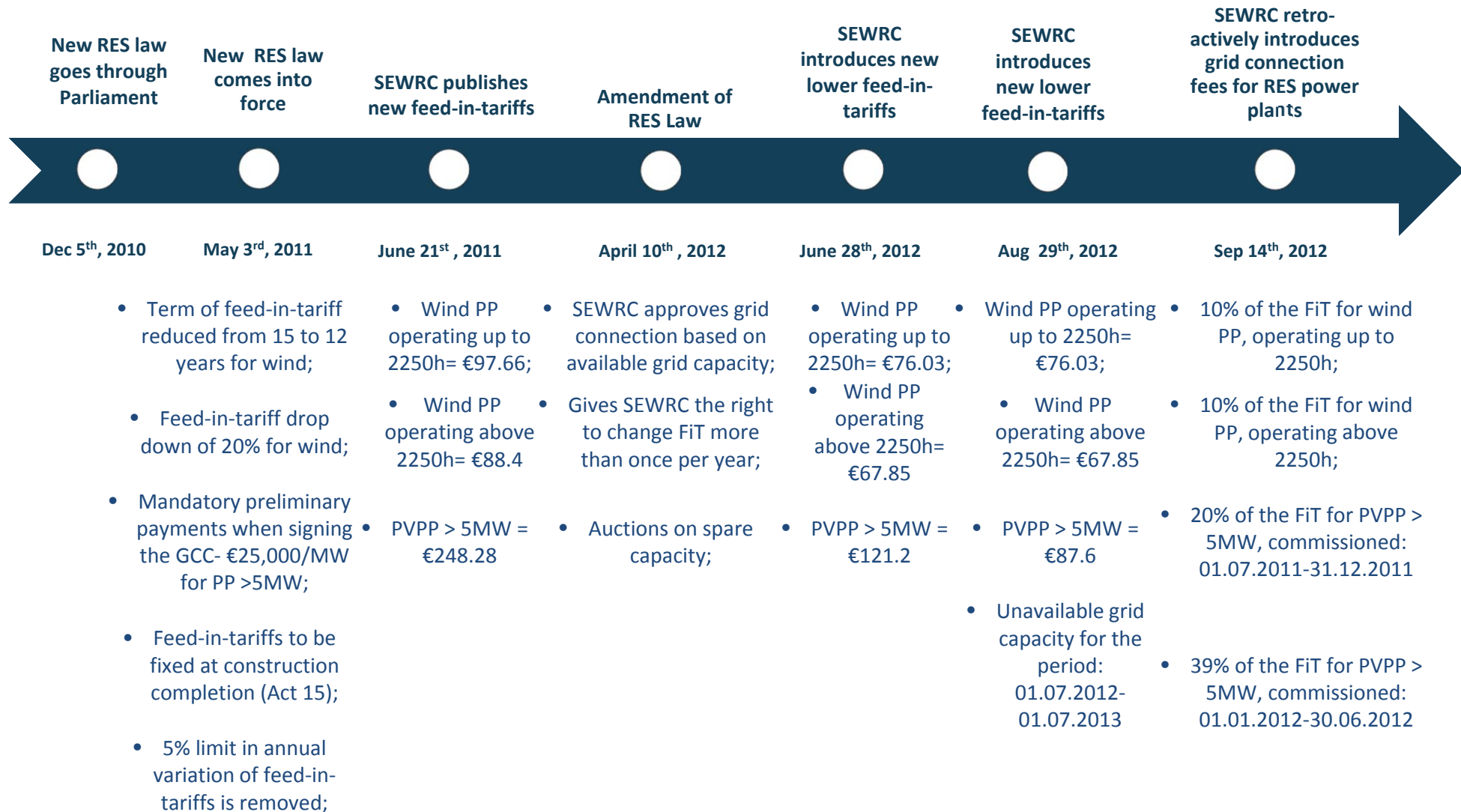
- Changing Framework
- Public misinformation by authorities
- Bulgaria's loss of credibility
- Lack of transparency
- Lack of proper institutions and local capacity
- Overall resistance to change
- Complete defeat of wind on the PR front

- ❖ Populist short-sighted energy policy
- ❖ Resistance by National Electricity Company
- ❖ Resistance by Transmission System Operator
- ❖ Pressure from Regulator
- ❖ Pressure from Ministry of Environment
- ❖ Pressure from Ministry of Agriculture

- ❖ New Renewable Energy Law
- ❖ New Energy Law
- ❖ New Law on Agricultural Land
- ❖ New restrictive Environmental Procedures



## NEW LAW ON RENEWABLE ENERGY



**Activity**

**Duration**  
(months)

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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Screening/Site Selection

3

Wind monitoring

-

Micrositing

3

Land Acquisition

12

Geodesy & Geology

6

**Detailed Zoning Plans**

9

**Environmental monitoring**

15

**Environmental Impact Assessment**

15

**Grid Connection Agreement**

12

**Building Permit**

6

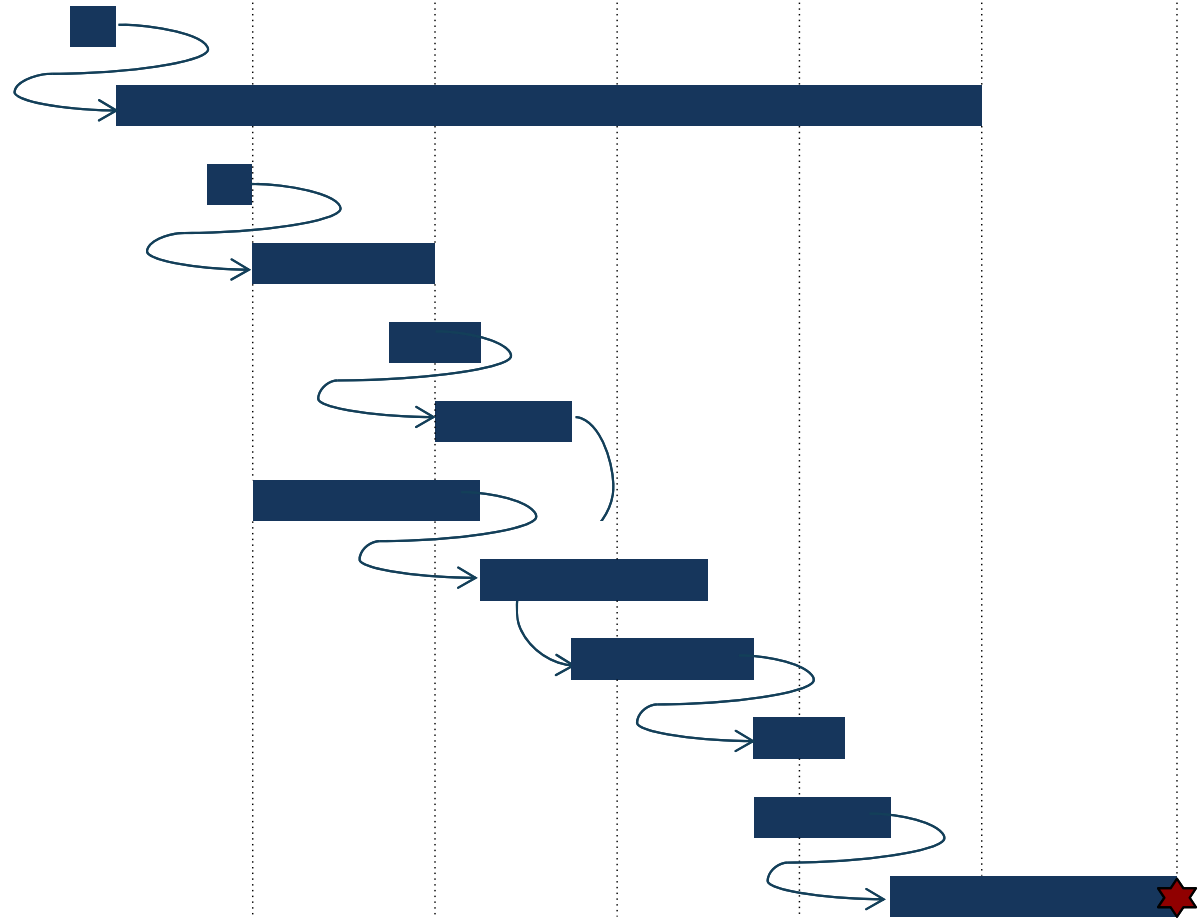
**Financing**

12

**Construction**

18

Dependent on legal framework & administration





## NATIONAL ACTION PLAN INDICATIVE GOALS (DIRECTIVE 2009/28/EU)

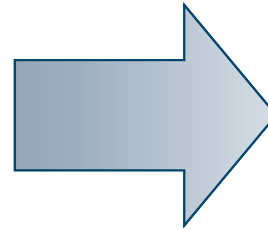
- Guaranteed Feed-in-tariffs for RES power plants;
- Mandatory buy up of produced RE for a 15/25 year term;
- Guaranteed priority on grid connection for producers of renewable energy;
- Administrative competence and increased capacity for project development assistance;
- Creation of a national data base with installed capacities, energy production and consumption available to the public;
- Public informational campaigns promoting RES;

- The build up of renewables, according to the NREAP (18.04.2011), will be the following (in MW):

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Hydro	2156	2188	3055	3065	3076	3086	3094	3100	3275	3281	3285	3288
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
Solar	7	35	135	780	130	186	251	265	275	285	287	303
<b>Wind</b>	<b>335</b>	<b>488</b>	<b>516</b>	<b>539</b>	<b>980</b>	<b>1115</b>	<b>1274</b>	<b>1315</b>	<b>1370</b>	<b>1398</b>	<b>1420</b>	<b>1440</b>
Biomass	3	3	10	22	46	94	147	152	153	155	156	158
<b>Total</b>	<b>2501</b>	<b>2714</b>	<b>3716</b>	<b>4306</b>	<b>4232</b>	<b>4481</b>	<b>4766</b>	<b>4832</b>	<b>5073</b>	<b>5119</b>	<b>5148</b>	<b>5189</b>

## CURRENT REGULATORY AND INSTITUTIONAL BARRIERS

- Constantly changing legal framework;
- Lack of consistency and unity between local regulations, national laws EU directives;
- Insufficiently developed grid capacity;
- Lack of adequate administration services;
- Lack of credibility for Bulgaria as an investment destination
- Little information on renewable and negative public image;



## ACTIONS NEEDED TO REACH THE 2020 INDICATIVE GOALS

- Resolution of past mistakes;
- Long-term feed-in-tariffs providing financial security for investors;
- Clear environmental legislation compliant with EU directives;
- Efficient grid capacity expansion;
- Competent and cooperative administration services;
- Public informational campaigns and better understanding of the benefits from RES;



## WAY FORWARD

### HOW TO OVERCOME THE CHALLENGES

*Bulgaria needs to embrace the green revolution not view it as a burden*

- ✓ A viable legislation that inspires confidence in investors; projects have to be bankable; wind should be given advantage over solar as it is the cheapest technology.
- ✓ Expanding the capacity of the grid in the areas that have the best wind resource.
- ✓ Clear environmental legislation that is based on EU norms. Guidelines for all should be set into place!
- ✓ Administration that doesn't hinder wind development and courts that allow for quick resolutions .
- ✓ General support of the public – awareness that wind energy is not expensive and will have negligible impact on people's electricity bills. Furthermore, it will preserve Bulgaria's beautiful nature.
- ✓ Bulgaria's geographical position together with inexpensive labour costs make it ideal for turbine manufacturers and other companies in the sector to setup a base here to serve expanding neighbouring markets (Serbia, Romania, Bulgaria, Turkey).
- ✓ Bulgaria could potentially develop its market in advance and become an exporter of green electricity.
- ✓ Problems need to be quantified not just qualified. Wind has drawbacks (e.g. intermittency) but that has a price that can be factored in and wind energy will still come out as the best technology for new generation.