

Situational Analysis of EU renewable energy legislation

Options for a post 2020 framework (ongoing research)



Institute for
European Studies
Vrije Universiteit Brussel

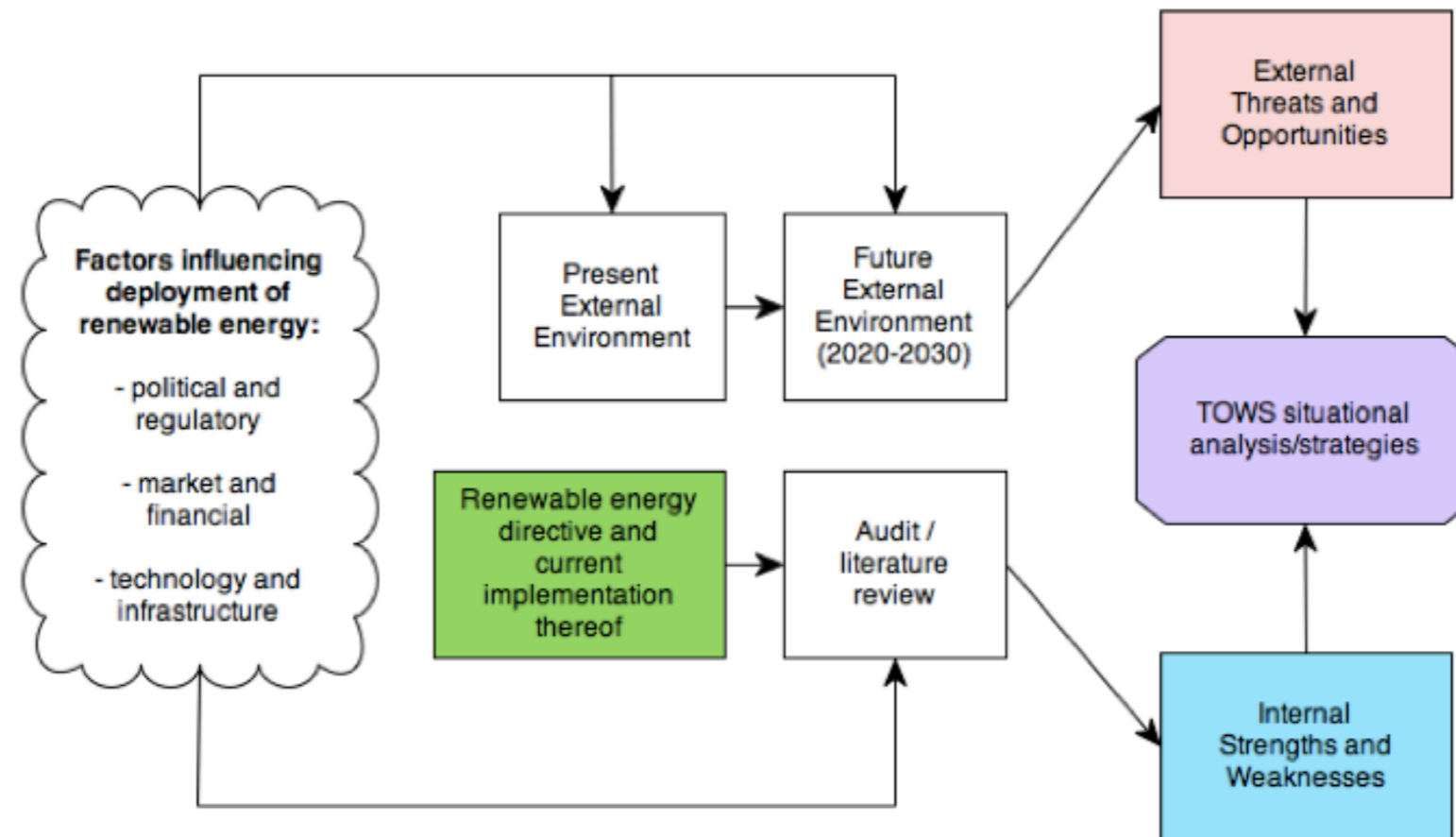


Vrije
Universiteit
Brussel

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Tomas Wyns, Researcher IES, tomas.wyns@vub.ac.be

Methodology (TOWS/SWOT)



Internal/Current →	(S) Strengths	(W) Weaknesses
External/ Current & Future ↓		
Opportunities (O)	<i>SO [maxi-maxi]</i> maximise internal strengths to maximise gains from external opportunities	<i>WO [mini-maxi]</i> minimise the internal weaknesses and maximise the available external opportunities
Threats (T)	<i>ST [maxi-mini]</i> maximise internal current strengths, which are capable of dealing with external threats	<i>WT [mini-mini]</i> diminish both the internal weaknesses and external threats

Factors

Political and Regulatory factors

- Political Commitment, regulatory stability and predictability
- Binding supranational goals and/or obligations
- Regulatory barriers for deployment of renewable energy
- Reporting, monitoring, compliance and enforcement

Market and financial factors

- Electricity market environment
- Costs and financing
- Macro-economic environment

Technological & Infrastructure Factors

- Technology learning curves
- Infrastructure robustness/interconnections

EU Renewable Energy Legislation SWOT

Internal Strengths	Internal Weaknesses
<ul style="list-style-type: none"> • <i>Binding renewable energy targets (S1)</i> • <i>Binding measures to remove regulatory and other barriers (S2)</i> • <i>Planning and reporting assisting the compliance regime (S3)</i> • <i>Mechanisms for cooperation between Member States (S4)</i> 	<ul style="list-style-type: none"> • <i>Sunset on binding targets (W1)</i> • <i>Uncertainty about future of binding measures (W2)</i> • <i>Limited compliance regime and uneven implementation (W3)</i> • <i>Weak and conflicting provisions on financing (W4)</i> • <i>Limited requirements regarding infrastructure enhancement including related cooperation between Member States (W5)</i>
External Opportunities	External Threats
<ul style="list-style-type: none"> • <i>Policy diffusion, alignment and momentum (O1)</i> • <i>Renewables help meet energy savings goal and improve energy security (O2)</i> • <i>Synergies with growing global market for renewable energy (O3)</i> • <i>Completion of the EU internal electricity Market assisted by ENTSO-E network codes (O4)</i> • <i>LCOE gap collapsing for some key technologies and balance of system cost cutting opportunities (O5)</i> • <i>Domestic and grid scale battery storage becomes economically attractive between 2020-2030 (O6)</i> • <i>The Enabling power of Projects of Common Interest in EU energy infrastructure and the Juncker plan (O7)</i> 	<ul style="list-style-type: none"> • <i>Binding renewable energy targets for Member States cease to exist after 2020 (T1)</i> • <i>Binding measures present under the current EU renewable energy directive cease to exist after 2020 (T2)</i> • <i>Growing deployment of renewable energy can lead to increased public resistance (T3)</i> • <i>The self-destructive power of renewables in a marginal cost based wholesale electricity market (T4)</i> • <i>Structural low economic growth and deflation in Europe (T5)</i> • <i>Member States' protectionism through electricity infrastructure (T6)</i> • <i>Stubborn LCOE gap for off-shore wind energy (T7)</i>

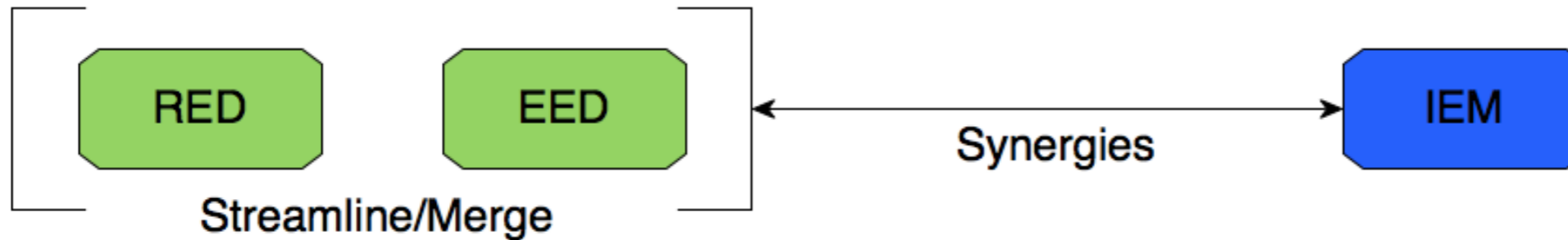
TOWS Matrix: 4 strategies

	STRENGTHS (internal)	WEAKNESSES (internal)
	<p>Binding renewable energy targets (S1)</p> <p>Binding measures to remove regulatory and other barriers (S2)</p> <p>Planning and reporting assisting the compliance regime (S3)</p> <p>Mechanisms for cooperation between Member States (S4)</p>	<p>Sunset on binding targets (W1)</p> <p>Uncertainty about future of binding measures (W2)</p> <p>Limited compliance regime and uneven implementation (W3)</p> <p>Weak and conflicting provisions on financing (W4)</p> <p>Limited requirements regarding infrastructure enhancement including related cooperation between Member States (W5)</p>
OPPORTUNITIES (external)	<p><i>(SO) Use the Force</i></p> <p>NREAPs and binding measures to include (streamlined) financing provisions (S2, S3 : O5) and the use of Positive net benefit differential (PNBD) model for joint benefit calculation of projects between Member States (S2, S3 : O4, O7).</p> <p>Binding "triad" of 2030 storage, demand response and high voltage interconnections targets for Member States (S1, S2 : O4, O6, O7).</p> <p>Bring in enhanced measures to reduce regulatory & other costs not related to the renewable energy technology itself. Demand side measures requiring the integration of renewable energy in buildings and other infrastructure to bring down the balance of system cost (S2 : O5)</p> <p>Binding measures to include for obligation for ENTSO-E obligation to make 10y year network development plans and network codes forward compatible with the EU's 2030 renewable energy target. ACER tasked to verify national electricity regulations for compatibility with higher levels of renewable energy (S2, S3 : O4, O7).</p>	<p><i>(WO) Move on and hope for the best</i></p> <p>Binding targets could disappear but binding energy planning and measures are maintained. Existing planning, reporting and compliance regimes could be technically improved and streamlined. (W2, W3 : O5).</p> <p>Enhanced energy efficiency regulations (e.g. through inclusion of renewable energy in building standards) (W1 : O3, O5)</p> <p>Optimisation of the EU internal energy market and cross-border investments (W1, W5 : O4, O7).</p> <p>Streamlining of EU state aid rules with provisions in the renewable energy directive (W4 : O1).</p>
THREATS (external)	<p><i>(ST) Plan against failure</i></p> <p>Bottom up targets set by Member States but binding through (2020-2030) NREAPs (S2, S3 : T1).</p> <p>The NREAPs demanding higher levels of transparency and public consultation and participation. (S2 : T3, T5)</p> <p>Introduction of cost containment measures, such as a fixed Internal Rate of Return (IRR) as support benchmark (S2 : T3, T5)</p> <p>NREAPs to include joint projects between Member States or other forms of cooperation. Binding measures to include removal of cross-border barriers (S2, S3, S4 : T6)</p> <p>Measures and NREAPs to address the higher LCOE of off-shore wind energy. EU R&D and infrastructure funding for Member States creating a market or cooperation in this area. (S2, S3 : T7)</p>	<p><i>(WT) Liquidation and Merger</i></p> <p>EU renewable energy directive faces de facto liquidation after 2020.</p> <p>Option exists to merge important parts (e.g. binding measures) of the current directive with other EU energy legislation (e.g. EED, IEM) as to salvage important strengths of the current framework.</p> <p>However not certain to what extent this is possible and hence important parts of the renewable energy directive could still disappear. (T1, T2 : W1, W2)</p>

Concluding

- Options exist to enhance EU Renewables deployment, even in absence of (top-down) binding national 2030 targets.
- Some scenarios are best avoided (e.g. liquidation and merger)
- Enhancement of EU RE comes from improving existing directive (e.g. measures)...
- but also better alignment, streamlining and synergies with other parts of EU (energy) law (e.g. IEM, EED, State Aid, ...)

Example: Blueprint post 2020 policy framework (work in progress)



- * Enhanced/streamlined planning and reporting (NREAPs, NEEAPs)
- * Enhanced monitoring/compliance regime
- * Demand side measures
- * Bundled demand response, interconnection and storage target
- * Cost containment in support measures

- * ENTSO-E 10y grid investment plans consistent with 27% 2030
- * Network codes supporting RE deployment
- * Enhanced role for ACER: monitoring national regulation and investments esp. blocking of RE across borders

