

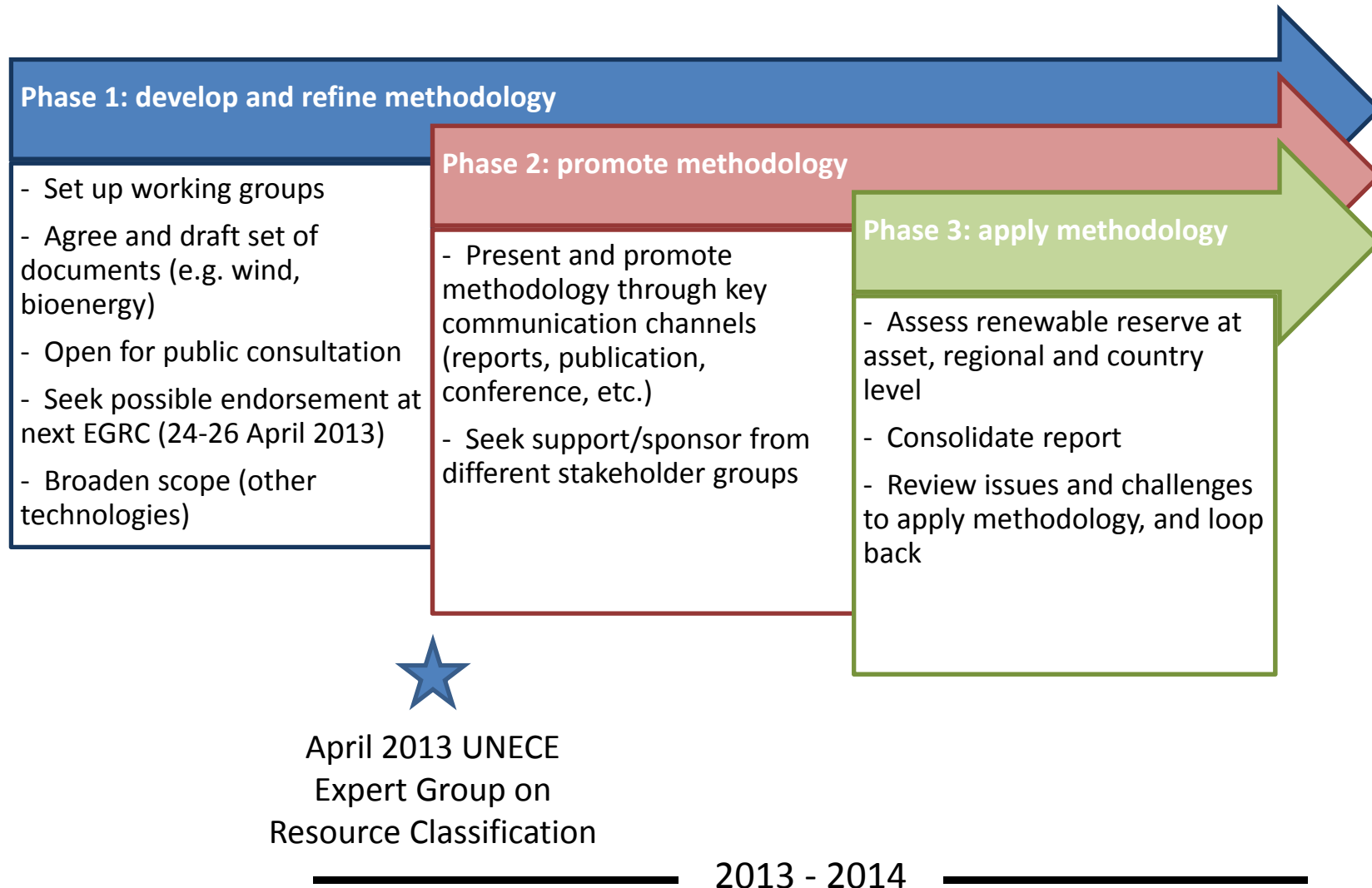
Renewable Reserves Workshop

Way forward

London
Session 8
November 1st 2012



Proposed stages of development













There are several tangible deliverables from this work

Specifications adopted by the industry under the UN Classification Framework	Description	Proposed Lead	Working group
<div style="border: 1px solid orange; padding: 5px; text-align: center; margin: 10px auto; width: 80%;"> United Nations Framework Classification (UNFC) </div>	<p>Existing methodology; needs editing to include renewables, but would follow same format and content as existing one</p>	<p>TBD</p>	<p>Renewable</p>
<div style="border: 1px solid orange; padding: 5px; text-align: center; margin: 10px auto; width: 80%;"> Renewables Specification </div>	<p>20-30 pages document with generic specifications applicable to all renewable energy; includes which classification framework to use, methods to estimate volumes, reporting principles, etc.</p>	<p>TBD</p>	<p>Renewable</p>
<div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid orange; padding: 5px; text-align: center; width: 30%;"> Bioenergy specifications </div> <div style="border: 1px solid orange; padding: 5px; text-align: center; width: 30%;"> Wind specifications </div> <div style="border: 1px solid orange; padding: 5px; text-align: center; width: 30%;"> Other technologies specifications </div> </div>	<p>Set of ~20-page documents with specifications applicable to each respective technology; includes for example commercial and technical criteria for each resource category</p>	<p>TBD</p>	<ul style="list-style-type: none"> • Bioenergy • Power • Other • TBD
<div style="border: 1px solid orange; padding: 5px; text-align: center; margin: 10px auto; width: 80%;"> Conversion </div>	<p>Summary of conversion principles across energy metrics (e.g. MW or gallons of ethanol into barrels of oil equivalent)</p>	<p>TBD</p>	<p>Renewable</p>

Example of content of renewable specification

	Section	Content
1	Basic Principles and Definition	<ul style="list-style-type: none"> • Renewable Resources Classification Framework • Project-Based Resources Evaluations
2	Classification and Categorization Guidelines	<ul style="list-style-type: none"> • Resources Classification <ul style="list-style-type: none"> • Determination of Identification Status • Determination of Commerciality • Project Status and Commercial Risk • Resources Categorization <ul style="list-style-type: none"> • Range of Uncertainty • Category Definitions and Guidelines • Incremental Projects <ul style="list-style-type: none"> • Redevelopments, Treatments, and Changes of Equipment • Other improvements
3	Evaluation and Reporting Guidelines	<ul style="list-style-type: none"> • Commercial Evaluations <ul style="list-style-type: none"> • Cash-Flow-Based Resources Evaluations • Economic Criteria • Economic Limit • Production Measurement <ul style="list-style-type: none"> • Reference Point • Lease Fuel • Production Balancing • Resources Entitlement and Recognition <ul style="list-style-type: none"> • Land Leases • Contract Extensions or Renewals
4	Estimating Recoverable Quantities	<ul style="list-style-type: none"> • Analytical Procedures <ul style="list-style-type: none"> • Analogs • Net Capacity Factor Estimate • Production Performance Analysis • Deterministic and Probabilistic Methods <ul style="list-style-type: none"> • Aggregation Methods

Proposed agenda for 12 months to come

Task	Lead	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct
Create workplan, working groups and project governance	TBD	 Kick off Industry workshop											
Draft Renewable Specifications	TBD												
Draft Commodity Specifications for Bioenergy	TBD												
Draft commodity spec for wind	TBD												
Share finding with UNECE group (3 weeks prior meeting) and present at UNECE working group	TBD				 Second industry workshop		 Presentation at EGRC meeting						
Publish draft specification for public consultation	TBD												
Finalise specification documents	TBD												
Promote methodology through specific communication channels (conference, report, etc.)	TBD												
Apply methodology at asset, company and country level	TBD												

Sequential or in parallel?

Working task groups

Working group 1 Renewables	Working group 2 Bioenergy	Working group 3 Power	Working group 4 Other
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.
4.	4.	4.	4.
5.	5.	5.	5.
6.	6.	6.	6.
7.	7.	7.	7.

Note: depending on whether work is sequential or in parallel, groups might be similar between renewables and technology specific

Other topics

- Other workshops, meetings like this one?
- Best communication channels?
- Who is missing in the room? In the future?