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Needs analysis of the Wind Energy sector



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Outline

- The learning cycle
- Wind Energy forecast Findings- Environment Canada perspective
- Common findings from energy sector
- Next steps



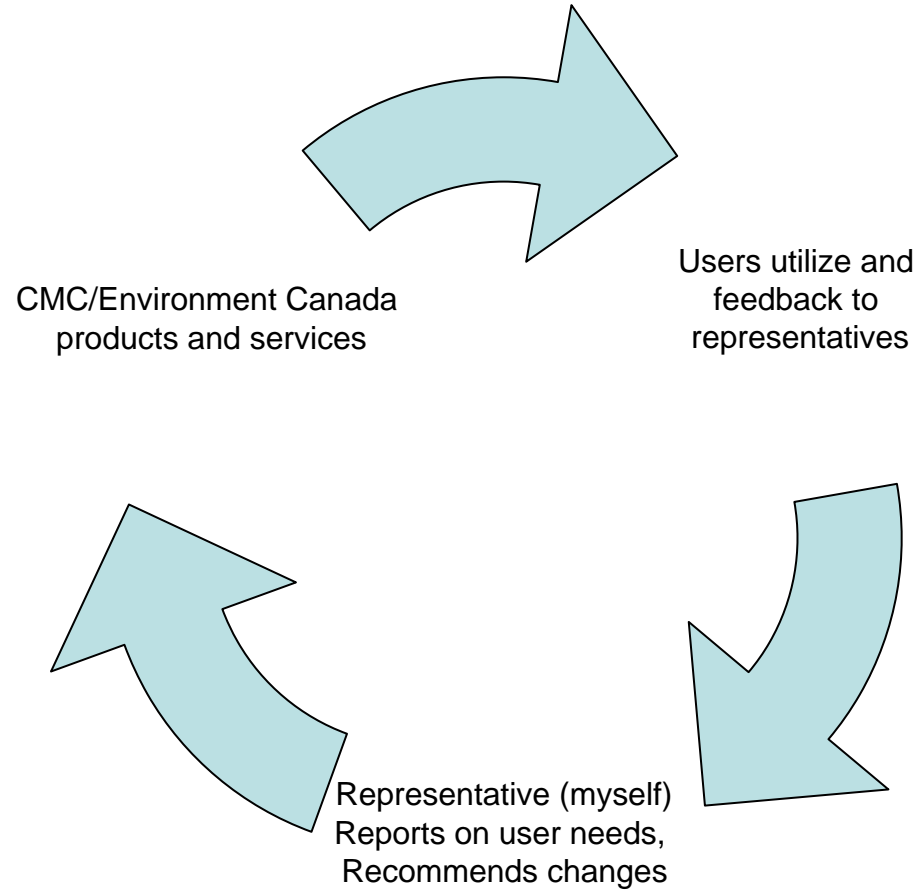
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DRAFT – Page 2 – June 19, 2008

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The process



DRAFT – Page 3 – June 19, 2008



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Wind Energy Findings- Environment Canada perspective

- System operators have a steep learning curve of wind energy/forecasting, resource needed to help them understanding the science, its capabilities, its limitations and its potential uses/benefits to their operations.
- Need for special set of current weather data from MSC auto stations for support of wind forecasting
- Need for more current weather data (more stations)
- Need for more model runs (18 and 06Z being developed)
- Need access to model output sooner than currently available.(3D Anal)
- Need for higher resolution models (Gem Lam)

DRAFT – Page 4 – June 19, 2008



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Common findings from energy sector

- Need specific data sets extracted from MSC auto stations.
 - Represent energy sector at table when identifying programming changes for Campbell scientific weather stations
- Need to promote our database of scientific knowledge
 - Promote MSC libraries (locations, web sites etc ... perhaps on national organization web sites such as CANWEA)
- Need to promote scientific studies and projects
 - Once again, perhaps a web site/page which would kept up to date.
- High interest in climate change impacts on temp/pcpn mostly.. Study on MJO (Madden Julian Oscillation and more)



Environment Canada next steps

- Final and complete Needs Analysis will be distributed amongst staff within MSC.
- Discussions will begin within the different sectors of the department on content of Needs Analysis.
 - Model improvements
 - Data access and enhancement
 - Sharing of knowledge (scientific studies)
 - More
- Goals will be determined and projects for initiating changes will be implemented.
- Projects will complete and cycle starts over again.



THANK YOU!



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DRAFT – Page 7 – June 19, 2008

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