Using probabilistic analysis to improve greenhouse gas baseline forecasts in developing country contexts: the case of Chile

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© 2018, © 2018 Informa UK Limited, trading as Taylor & Francis Group. In this paper, initial steps are presented toward characterizing, quantifying, incorporating and communicating uncertainty applying a probabilistic analysis to countrywide emission baseline forecasts, using Chile as a case study. Most GHG emission forecasts used by regulators are based on bottom-up deterministic approaches. Uncertainty is usually incorporated through sensitivity analysis and/or use of different scenarios. However, much of the available information on uncertainty is not systematically included. The deterministic approach also gives a wide range of variation in values without a clear sense of probability of the expected emissions, making it difficult to establish both the mitigation contributions and the subsequent policy prescriptions for the future. To improve on this practice, we have systematically included uncertainty into a bottom-up approach, incorporating it in key variables that affect expecte