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# Stochastic Programming for Fuel Supply Planning of Combined Heat and Power Plants

Daniela Guericke<sup>1</sup> Ignacio Blanco<sup>1</sup>, Juan M. Morales<sup>2</sup>, Henrik Madsen<sup>1</sup>

<sup>1</sup>Department of Applied Mathematics and Computer Science  
Technical University of Denmark  
Asmussens Allé, 2800 Kgs. Lyngby, Denmark  
{dngk,igbl,hmad}@dtu.dk

<sup>2</sup>Department of Applied Mathematics, Málaga University  
Bulevar Louis Pastor, 29010 Málaga, Spain  
juan.morales@uma.es

The consumption of biomass to produce power and heat has increased due to the carbon neutral policies. Combined heat and power (CHP) plants often combine biomass with other fuels, e.g., natural gas. The negotiation process for supply contracts involves many uncertainties due to the long planning horizon. The demand for biomass is uncertain, and heat demand and electricity prices vary during the planning period. We propose a method using stochastic optimization to support the biomass and natural gas supply planning for CHP plants including short-term decisions for optimal market participation.