



e-EUBCE 2020
28th European Biomass
Conference & Exhibition

6 - 9 JULY

The Virtual Experience





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This year, you couldn't go to the
conference...

....but instead we came to you

in your office

in your holidays

in your home

in your garden

What an e-EUBCE means...

We missed you a lot, as much as you missed your colleagues, your friends and new contacts

We missed also the applause after each session, the coffee breaks, the hugs and handshakes.

To compensate, we tried hard to give many new opportunities for interaction

Interaction

- Q&A for each presentation
- Chat and Chat rooms
- Meet your colleagues
- The Delegate's Bag
- Virtual Exhibition

Ernesto ...!



Audience?



Three

Audience?



Three

Total of **4073** in 64 sessions by Wednesday evening;
Life Opening: **1538!**

Audience outreach

with registered participants from 87 countries, we have a new record

What will happen when we announce the possibility of virtual presentation / participation already with the Call for Papers?

A new, participatory feeling for all....

Audience feedback



Tweet

 **Dr Zoe M Harris**
@Zoe_M_Harris

i cant really complain about an 8am start but lock-down life does not demand early starts! Very pleased that I can go back and watch the early morning sessions I missed @EUBCE #EUBCE2020 - sorry @Andrew_welfle :P

9:46 AM · Jul 7, 2020 · Twitter Web App

4 Likes

Reply Retweet Like Share

You Retweeted

 **Ron Kirchner** @BiomassMuse - 2h

I love this #biomass conference. And this years, for the good or the bad, you can join some of the workshops for free and it's virtually. Thank you @EUBCE ! #algae #bioenergy

 **EUBCE** @EUBCE - Jun 30

Highlighting efforts & investments of the EU Algal #industry 2 deploy algae based #technologies & products. That's the aim of Algae Industry #workshop by @EABA_Algaes & U.S.Department of Energy that will be held during e-#EUBCE2020 with free access!

Visit bit.ly/2BPA1rF

e-EUBCE 2020
6 - 9 July

ORGANISED BY
EUBCE EUROPEAN UNION BIOMASS CONFERENCE

Feedback_eEUBCE@etaflorence.it

Poster sessions

5AV.3.1 - Concentrated Solar-Biomass Hybrid Plant for Electricity Generation in New South Wales, Australia (Click here to submit questions)



Hybrid concentrated solar-biomass plants - Electricity generation in New South Wales, Australia

Ella M. Middelhoff¹, Leandro Andrade Furtado², Nick Florin³, Fabiano Ximenes⁴ & José Alberto Reis Parise²



TO GET IN CONTACT

SCAN ME

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INTRODUCTION

New South Wales (NSW), Australia's most populated state, has the goal to achieve zero emissions by 2050 (NSW Government 2016).

Hybrid concentrated solar-biomass (HCSB) power plants can support this goal and are capable of generating dispatchable renewable energy (Peterson et al. 2014).

The Riverina region in NSW was explored as a prime location for HCSB plants owing to the currently under-exploited excellent biomass and solar resources (Fig. 1). A focus on using agricultural waste residues also offers an alternative to the current practice of on-field stubble burning avoiding adverse environmental impacts (Fig. 2).

OBJECTIVES & METHODS

HCSB plants in the Riverina are investigated for their:



Technical feasibility based on a thermodynamic simulation of a proposed plant design using System Advisor Model (SAM) version 2018.11.11 (NREL, 2018) & a private industrial and research software of the Waste-to-Energy Research and Technology Council, Brazil;



Economic feasibility (cost, LCoE and IRR), considering up-to-date technology cost estimates (Lovegrove et al. 2018a); and



Environmental performance, considering spatial and carbon footprint of the plant.

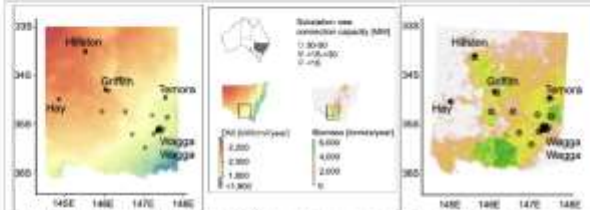
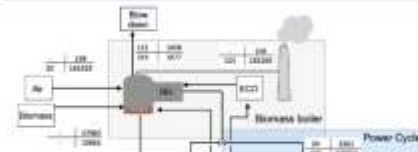


Figure 1: The Riverina region in NSW and zone delimitation with new connection capacity with (left) direct normal irradiation (DNI) and (right) agricultural residues (cereal and non-cereal straw), adapted from Middelhoff et al.



Figure 2: On-field stubble burning in Australia, source: private.

PROCESS DESCRIPTION & MODEL ASSUMPTIONS



Process description: 30MW, Biomass boiler and Concentrated Solar Power (CSP) (solar tower, ST) with 3-hour molten salts thermal storage (TES) operating in 'fuel-saving mode' whereby the CSP offsets biomass inputs during the day (Figure 3).

At full load either biomass boiler or a combination of CSP and biomass cycle generate 106,623Mh of steam at 529°C and 110bar achieving a net global efficiency of 30%.

The plant operates for 7,300 hours per year, with solar capacity factor of 23%, producing a total of 219,000MWh/a (solar share: 47,870MWh/a).

Q&A

Hi Ella This is a nice poster and great work indeed in this field. However, I have a questions here. Can you explain why have you used thermodynamic simulation? i.e. what are the characteristics of that simulation? by Mohammad SHAFIQUIL ISLAM

test by null

Send

exhibitors



Exhibition

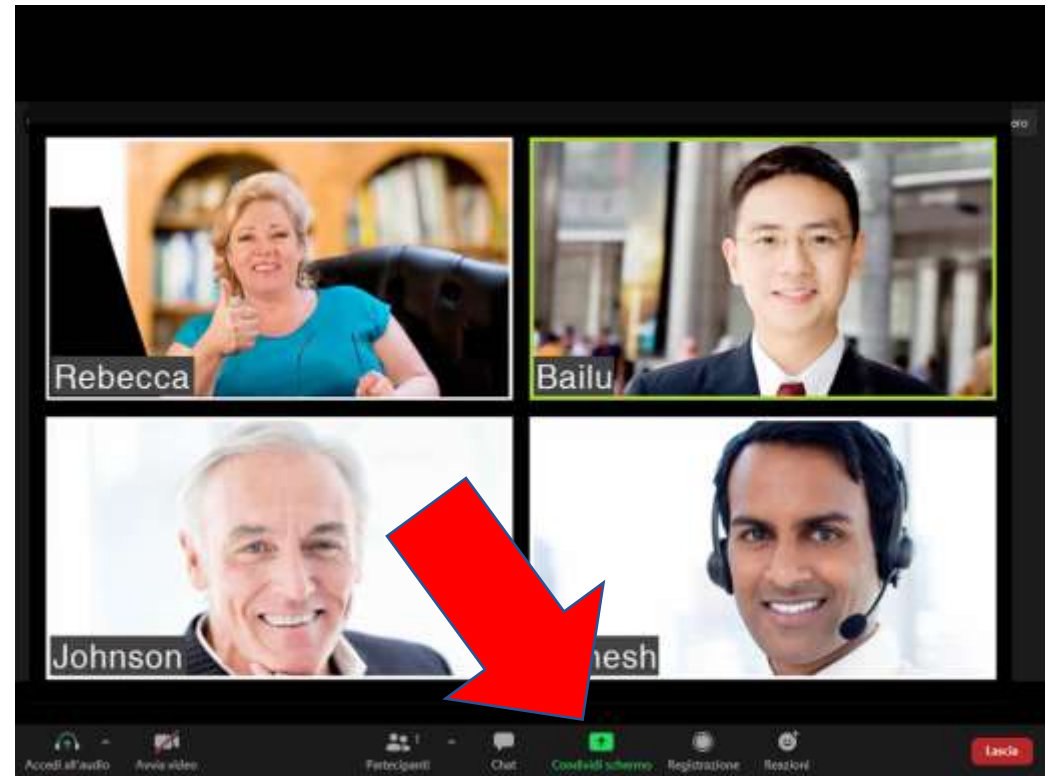
- 1784 Visitors on one single day!



Thanks to our presenters
(and their variety of
backgrounds)

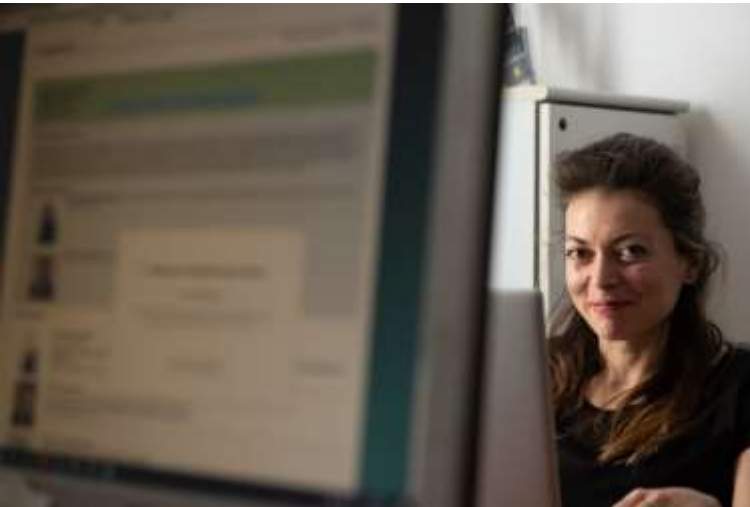


Session Chairs intervening....



Nr. One Problem:
find the right (**country-specific!!**) button....

You were never really alone...





16+1+1



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