



**5th International Conference on
BIOMASS FOR ENERGY
22-23 September 2009, Kyiv, Ukraine**

PROGRAMME

ORGANISERS OF THE CONFERENCE



**Institute of Engineering Thermophysics,
the National Academy of Sciences of Ukraine**



**National Agency of Ukraine
for Effective Energy Use**



Scientific Engineering Centre "Biomass"



**SPONSOR of the Seminar "An Action Plan for
Implementation of Bioenergy":
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Markets Workshop:**

Methane to Markets Partnership



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- Ministry of Agricultural Policy of Ukraine
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- Committee of the Verkhovna Rada of Ukraine for Fuel-Energy Complex, Nuclear Policy and Nuclear Safety
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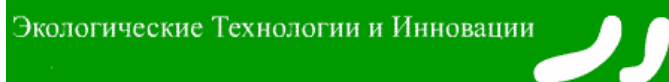
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International ecological forum "Eco solutions – new technologies"

<http://www.lemberg.ua>



Internet-project BIO Resurs

<http://www.bioresurs.com.ua>



Internet-portal about events and trends at renewable energy markets of CIS

<http://www.fuelalternative.com.ua>



Informational and publishing house "CenterInform"

<http://www.info-ua.com>



International specialized exhibition of alternative energy

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<http://www.agrihort.com.ua>



Research institute of atmospheric air protection

("NII Atmosphere")

<http://www.nii-atmosphere.ru>

PROGRAMME OUTLINE

Tuesday, 22 September 2009

8:30 – 9:30	<i>Registration of conference participants</i>	
9:30 – 10:15	BH: Opening ceremony	
10:15 – 11:15	BH: Plenary session P1	
11:15 – 11:45	<i>Coffee break</i>	
11:45 – 13:00	BH: Sections 1, 4	LH: Landfill Methane to Markets Workshop (Methane to Markets Partnership)
13:00 – 14:00	<i>Lunch</i>	
14:00 – 15:30	BH: Section 3	LH: Landfill Methane to Markets Workshop (Methane to Markets Partnership)
15:30 – 16:00	<i>Coffee break</i>	
16:00 – 17:00	BH: Sections 1, 4	LH: Landfill Methane to Markets Workshop (Methane to Markets Partnership)
17:00 – 18:00	Discussion	
18:30 – 21:00	<i>Reception for the conference participants</i>	

Wednesday, 23 September 2009

9:00 – 10:30	BH: Plenary session P2		
10:30 – 11:00	<i>Coffee break</i>		
11:00 – 13:00	BH: Section 2	LH: Workshop “An Action Plan for Implementation of Bioenergy” (Ukrainian-Dutch G2G project “Biomass and Biofuels in Ukraine”)	
13:00 – 14:00	<i>Lunch</i>		
14:00 – 15:30	BH: Section 2	LH: Section 5	F: Visual presentations
15:30 – 16:00	<i>Coffee break</i>		
16:00 – 17:30	BH: Section 2	LH: Section 5	
17:30 – 18:00	BH: Closing ceremony		

Conference venue:

The Fifth International Conference on Biomass for Energy will be held at premises belonging to the Presidium of the National Academy of Sciences of Ukraine (55, Vladimirskaya str., Kiev).

BH – Big Hall (1st floor)
 LH – Little Hall (1st floor)
 F – Foyer (ground floor)

Section 1 – Biomass resources and pre-treatment
 Section 2 – Research and development of bioenergy technologies
 Section 3 – Demonstration and market implementation of biomass to energy technologies
 Section 4 – Strategy and policy issues
 Section 5 – Economic and environmental issues of bioenergy technologies

Tuesday, 22 September 2009

Registration of participants 8:30 – 9:30

BIG HALL

Opening Ceremony **9:30 – 10:15**

Chairpersons of Opening
Ceremony and Plenary Session

Anatoliy Dolinsky
Conference Chairman
Director of the Institute of Engineering Thermophysics of
NASU, Academician of NASU
Kees Kwant
Deputy Chairman
SenterNovem, The Netherlands

Welcome Addresses

Anatoliy Dolinsky
Conference Chairman
Kees Kwant
Deputy Chairman
Representatives of legislative and executive power

Plenary Session P1 **10:15 – 11:15**

P 1.1 **State of the art and prospects for bioenergy development in Ukraine.** Georgiy
10:15 – 10:45 Geletukha, Anatoliy Dolinsky (Institute of Engineering Thermophysics NASU,
SEC Biomass, Kyiv, Ukraine)

P 1.2 **Bioenergy in the Renewable Energy Directive in the EU and implementation
10:45 – 11:15 by using Action Plans.** Kees Kwant (SenterNovem, The Netherlands)

Coffee-break 11:15 – 11:45

Section1, 4 (Strategy and policy issues, biomass resources) **11:45 – 13:00**

Chairpersons Olexiy Prystaya
Andrej Stanev

- O 1. Resort possibilities and transport-technological principles of energy wood utilize.** Olexiy Prystaya (State Forestry Committee of Ukraine, Kyiv, Ukraine)
- O 2. Biogas production and use – lessons learnt in Germany and the EU.** Andrej Stanev (FNR, Germany)
- O 3. Local implementation of clean(er) fuel policies: key success factors.** Sliman Abu Amara (SenterNovem, the Netherlands)
- O 4. Financing of renewable energy projects: EBRD approach.** Sergey Maslichenko (EBRD, Kyiv, Ukraine)
- O 5. Rothamsted Research: The long-term research into the development of the UK's leading dedicated energy crops, Miscanthus and SRC Willow.** Nicola E Yates, Sviatlana O Trybush, Ian Shield, Andrew B Riche and Angela Karp (Centre for Bioenergy and Climate Change, Rothamsted Research, Harpenden, UK)

Lunch 13:00 – 14:00

Section 3 (Demonstration and market implementation of biomass to energy technologies) 14:00 – 15:30

Chairpersons

Volodymyr Kramar
Luis Monge

- O 6. **Experiences of TAIM WESER with its woodchip gasification pilot cogeneration plant and evolution from a testing facility to a product.** Luis Monge, Eduardo Aznar (TAIM WESER, Zaragoza, Spain)
- O 7. **Peculiarities of select of potential placement locations for straw fired boilers.** Anatoliy Bashtovoy, Svitlana Radchenko, Sergiy Chaplygin (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)
- O 8. **Can capture and storage of CO₂ issued from biomass become a reality? A study case from the “CPER Artenay” project.** A. Fabbri, A. Leynet, D. Bonijoly, and others (BRGM; Geogreen; LEO, France)
- O 9. **Additional funding opportunities for bioenergy projects under Kyoto Protocol mechanisms.** Volodymyr Kramar (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)
- O 10. **Suggestion on a Biomass Accounting Form with a Focus on Biomass Towns in Japan.** Lyudmyla Bespyatko, Kiyotaka Saga, Takashi Yanagida, Shinji Fujimoto, Tomoaki Minowa (National Institute of Advanced Industrial Science and Technology, Japan)
- O 11. **Attraction of European financing for the realization of Biofuel projects.** Aleksey Ivchenko (Moscow Representative Office Merloni Progetti S.p.A., Russia)

Coffee-break 15:30 – 16:00

BIG HALL

Section 1, 4 (Biomass resources, strategy and policy issues) 16:00 - 17:00

Chairperson

Petro Lakyda
Tetyana Zhelyezna

- O 12. **Frameworks for Straw Use for Energy in Western Europe.** Yuliya Voytenko, Philip Peck (Central European University, Budapest, Hungary; International Institute for Industrial Environmental Economics at Lund University, Lund, Sweden)
- O 13. **European methodologies for biomass potential assessment and Ukraine illustration case (FP7 project Bioenergy Europe – BEE).** Tetyana Zhelyezna, Olexandra Tryboi (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)
- O 14. **Estimation of forest biomass resources in Ukraine.** Petro Lakyda, Roman Vasylyshyn, Sergiy Zibtsev (National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine)

- O 15. Methods of corn waste pretreatment for incineration in the boilers.**
Volodymyr Kramar, Vitaliy Zubenko, Mykola Zhovmir (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)

Discussion «Barriers to bioenergy development in Ukraine» ***17:00 – 18:00***

Chairpersons

Georgiy Geletukha
Kees Kwant

LITTLE HALL

Landfill Methane to Markets Workshop ***12:00 – 17:00***
(Methane to Markets Partnership)

Reception for the conference participants

Restaurant “Saint-Petersburg” ***18:30 - 21:00***
Shevchenko av., 4

Wednesday, 23 September 2009

BIG HALL

Plenary Session P2

9:00 – 10:30

Chairpersons

Valeriy Dubrovin

Yuriy Matveev

P 2.1

9:00 – 9:30

Analysis of Ukraine's legislation for bioenergy development.

Tetyana Zhelyezna, Georgiy Geletukha (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)

P 2.2

9:30 – 10:00

State of the art and prospects for development of biogas technologies in Ukraine. Yuriy Matveev (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)

P 2.3

10:00 – 10:30

Prospects for liquid biofuels production in Ukraine. Valeriy Dubrovin (National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine)

Coffee-break 10:30 – 11:00

BIG HALL

Section 2 (combustion)

11:00 – 13:00

Chairpersons

Mykola Zhovmir

Gabriel Negreanu

- O 16. Opportunities of filtration combustion for realization of bioenergy technologies.** Vladimir Kislov, Evgeniy Salganskij, S. Glazov, G. Manelis, M. Salganskaja (Institute of problems of chemical physics of RAS, Chernogolovka, Russia)
- O 17. Filtration combustion a way for more efficient use of solid fuels in power generation.** Evgeniy Salgansky, S. Glazov, Vladimir Kislov, G. Manelis, E. Polianczyk, M. Salganskaya (Institute of Problems of Chemical Physics of RAS, Chernogolovka, Russia)
- O 18. Investigation of biomass decomposition under filtration combustion at dense bed unit.** Mikhail Gybinsky, E. Kremneva, G. Shevchenko, J. Shishko, S. Gybinsky (National Metallurgical Academy of Ukraine, Dnepropetrovsk, Ukraine)
- O 19. Combustion performance of a reverse combustion boiler firing various agricultural residues.** Gheorghe Ciocea, Tănase Panait, Ion V. Ion, Nicușor Vatachi, Lucian Mihăescu (S.C. Termaexim S.A, University of Galati, Polytechnic University Bucharest, Romania)
- O 20. Results of energy recovery from composite briquettes made from agricultural biomass and coal.** Ion Oprea, Lucian Mihăescu, Tudor Prisecaru, Gabriel Negreanu, Ionel Pișă, Elena Popa, Emil Enache, Sandor Bartha (Polytechnic University Bucharest, SC Enache Morarit SA; SC Erpek Ind SRL, Romania)
- O 21. Energy and ecological characteristics of straw fired boiler TC-350.** Mykola Zhovmir, Yevgen Oliynyk, Sergiy Chaplygin (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)

- O 22. **Hot-water boilers TCE-250 and TC-500 for straw bale combustion.** Yevgen Oliynyk, Sergiy Chaplygin, Mykola Zhovmir (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)
- O 23. **Hot-water boiler KCC-100 for small straw bale combustion.** Sergiy Chaplygin, Yevgen Oliynyk, Vitaliy Zubenko (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)

Lunch 13:00 – 14:00

Visual Presentations 14:00 – 15:30

BIG HALL

Section 2 (gasification, pyrolysis and other) 14:00 – 15:30

Chairpersons Oscar Rabinovich
Mykola Zhovmir

- O 24. **Specificity of plant off-cuts combustion in “moving” boiling layer**
 Fialko N.M., Butovsky L.S., Litovkin V.V., Meranova N.O., Granovskaya E.A., Shvetsova L.A. (Institute of Engineering Thermophysics of NASU, National technical university of Ukraine “Kiev polytechnic institute”; Kyiv, Ukraine)
- O 25. **Biomass gasification.** Jale Yanik, Andrea Kruse, Mehmet Saglam, Mithat Yüksel (Ege University, Turkey, Institutue for Technical Chemistry, Germany)
- O 26. **Gas-producing unit for synthesis gas production from waste wood.** Ya. Gnatyshyn, S. Lys, Yo. Badera, O. Mukha (National forestry engineering university of Ukraine, CSTI, Lvov, Ukraine)
- O 27. **Biomass pyrolysis.** Gozde Duman, Cagdas Okutucu, Suat Ucar, Jale Yanik (Ege University, Dokuz Eylul University, IMYO, Chemistry Program, Izmir, Turkey)
- O 28. **Numerical optimization of biomass particle fast pyrolysis in an inert fluidized bed.**
 Valentin Borodulya, Oscar Rabinovich, Leonid Vinogradov, G. Palchonok, V. Korban (A.V. Luikov Heat and Mass Transfer Institute, NAS of Belarus, Minsk, Belarus)
- O 29. **Investigations for production of soil-conditioners using biomass derivat.** Metodi Mladenov, Ek. Serafimova, Y. Pelovsky (University of Chemical Technology and Metallurgy, Sofia, Bulgaria)

Coffee-break 15:30 – 16:00

BIG HALL

Section 2 (biogas) 16:00 – 17:30

Chairpersons Grygoriy Kaletnik
Petr Kucheruk

- O 30. **Biofuels market making is the way to energy safety.** Grygoriy Kaletnik (Vinnitsa state agrarian university, Vinnitsa, Ukraine)

- O 31. **Opportunities of organic waste processing at Ukrainian enterprises for biogas production.** Petr Kucheruk, Tetyana Khodakovskaya (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)
- O 32. **Is it profitable to produce biogas in Ukraine?** Anna Kuznetsova, Kateryna Kutsenko, Heinz Strubenhoff (Institute for Economic Research and Policy Consulting, Kiev, Ukraine).
- O 33. **The choose of a reasonable mode of operation for the biogas plant's fermenter.** Alexander Zemlyanka, Mikhail Gubinsky (The Scientific design centre "BiogasProject", National metallurgical academy, Dnepropetrovsk, Ukraine)
- O 34. **Influence of objects of storage and delete of household waste on consisting of natural environment and people's health in Zaporozhya region.** Anatoliy Sevalnev, L. Gladun (State-run enterprise "Zaporozhya region sanitary-hygienic station", Inspection state architectonically build to control in Zaporozhya region, Zaporozhya, Ukraine)

BIG HALL

Closing Session ***17:30 – 18:00***

Concluding Speech Anatoliy Dolinsky, Conference Chairman
Kees Kwant, Deputy Chairman

LITTLE HALL

Workshop "An Action Plan for implementation of Bioenergy" ***11:00 – 13:15***
(Ukrainian-Dutch G2G project "Biomass and Biofuels in Ukraine")

LITTLE HALL

Section 5 (Economic and environmental issues of bioenergy technologies) ***14:00 - 15:30***

Chairpersons Mikhail Gybinsky
Jan Liebetrau

- O 35. **Economic feasibility of anaerobic treatment of residues of an alcohol production facility.** Jan Liebetrau (Deutsches Biomasseforschungszentrum, Leipzig, Germany)
- O 36. **What Biomass project owners may gain from GHG emission reduction initiatives?** Konstantin Drozd (First Climate Group, Zurich, Switzerland)
- O 37. **Ecological - economic analysis of introduction of technologies of production of biogas as an alternative source of motor fuel.** Victoria Khrutba, Alexander Kolosovskiy (National transport university, LTD. „Alliance-gas" Kiev, Kiev, Ukraine)
- O 38. **Economic efficiency of straw fired heating boilers implementation projects.** Anatoliy Bashtovoy, Svitlana Radchenko (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)

- O 39. **Alternative energy.** Svitlana Ivanova (Dnepropetrovsk national university, Dnepropetrovsk, Ukraine)
- O 40. **Modular boiler-houses on the biomass.** Igor Rudovych (Sukhin's Design Office, Kyiv, Ukraine)

Coffee-break 15:30 – 16:00

LITTLE HALL

Section 5 (*Economic and environmental issues of bioenergy technologies*) **16:00 - 17:30**

Chairpersons Mykola Roik
Oleg Yanovsky

- O 41. **Integration of regular fuel and biofuels production.** Galina Chybiskova (Institute of economics and forecasting of NASU, Kiev, Ukraine)
- O 42. **Certification of biofuels quality.** Oleg Yanovsky (Laboratory N1, Sevastopol, Ukraine)
- O 43. **Cultivation of fitoenergy crops for bioethanol production in Ukraine.** Mykola Roik, Vasiliy Kurylo, Mykhail Gumentik (Institute of sugar beet of Ukrainian agrarian academy, Kiev, Ukraine)
- O 44. **Alternative fuels of plant origin. Determination of fractional and chemical compositions.** Vladimir Semenov ("Alternative Fuel Scientific Research Institute", Kharkov, Ukraine)
- O 45. **Additional funding opportunities for energy saving and renewable energy projects under programs UKEEP1 UKEEP2.** Vladimir Kramar, Dmitriy Ivanenko (Institute of Engineering Thermophysics NASU, SEC Biomass, Kyiv, Ukraine)
- O 46. **Utilization of green mass as energy resource.** I. Timofte, V. Brega (Energy Institute, Institute of Ecology and Geography, Academy of Sciences of Moldova, Kishinev, Moldova)

VISUAL PRESENTATIONS

Wednesday

23 September 2009

14:00 – 15:30

- V 1. **Application of geosynthetic materials of German company NAUE when reclaiming the landfield for increase of the biogas production.** Aleksey Kudrya (ST-Group Ltd, Kiev, Ukraine)
- V 2. **Co-pyrolysis of pine cone with synthetic polymers.** Mihai Brebu, Suat Ucar, Cornelia Vasile and Jale Yanik (“Petru Poni” Institute of Macromolecular Chemistry, Romania, Dokuz Eylül University, Turkey, Ege University, Turkey)
- V 3. **Piston steam engine energy aggregate on biomass fuel.** Vadim G. Nekrasov (NETROEN-NT Ltd, Kazakhstan)
- V 4. **Biogas potential in the Ukraine – a spatial assessment.** Florian Schierhorn, Daniel Mueller (IAMO, Germany)
- V 5. **Investigation of γ radiation influence on biomass.** T. Agaev, K.Sultanova, I.Asadova (Institute of radiation problem, NAS of Azerbaijan, Azerbaijan)
- V 6. **Innovative method and equipment for biodiesel production from vegetable oil and spirits.** Grabov L., Shmatok A. (Institute of Engineering Thermophysics NASU, Kyiv, Ukraine)
- V 7. **Feasibility study and economical analysis on the coupling of biomass gasification with an MCFC stack.** A. Molino, M.T. Petrone, G. Fiorenza, G. Giordano, G. Braccio (Italian National Agency for New Technologies, Energy and Environment, Trisaia Research Centre, University of Calabria Rende, Italy)
- V 8. **Ecological and economical estimation of the basis of raw materials for bioethanol production and technological process.** Kakha Nadiradze, Tengiz Lagidze, Tamar Shamtava, Nana Phirosmanashvili (Biotechnology Center of Georgia, Ministry of Education and Science of Georgia, Tbilisi, Georgia)
- V 9. **Sorghum is alternative crop for biofuel production in the forest-steppe of Ukraine.** Kalenska S.M., Grynyuk I.P. (National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine)
- V 10. **New introduced plants in phytoenergetics of Ukraine.** Rakhmetov D.B. (M.M. Gryshko National Botanical Gardens, Kyiv, Ukraine)