

Preliminary Programme 27.1.2014

Schedule for

Biogas Compact Workshop

**Mass Dissemination of Domestic Biodigesters
in Developing Countries**

– from Technology to National Programmes –

Long-term experience and lessons learnt

Biochemistry, Project Planning, Technology

Apr. 7th – Apr.11th, 2014

University of Oldenburg, Germany

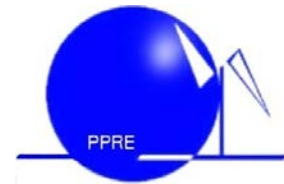
Experts from [SNV](#) share their 20 year project experience on mass dissemination programmes of domestic bio digesters in the South East Asia and Sub-Sahara. Further experts on microbiology, soil fertility, humus balance, urban organic waste and Economy are complementing the programme. One excursion and hands-on labs will be offered.

Monday, 7.4.2013	<p>Morning</p> <p>Start of Workshop</p> <p>8:30 – 9:15 Arrival and Registration of external guests</p> <p>9:15 – 9:30 Welcome Address by PPRE Staff member</p> <p>9:30 – 10:00 Presentation of schedule and sessions; Ms. Evelyn Brudler, Coordinator Biogas Workshop</p> <p>Introduction to expected contributions of the participants, the structure of optional sessions for the participants of the Alumni Seminar and the Biogas Workshop</p> <p>Introduction</p> <p>10:00 – 11:15 Domestic Biogas – Relevance of Biogas for Development; Jan Lam, SNV</p> <p>11:30 - 13:00 Lunch break</p> <p>Afternoon</p> <p>Biochemistry in Bio-digesters and its Practical Implications</p> <p>13:00 – 14:00 From Biomass to Energy: The Biochemical Anaerobic Fermentation Process; Prof. Rabus, Microbiologist, Univ. Oldenburg , requested</p> <p>14:00 – 15:00 Practical Implications of the Biochemical Process plus Discussion Felix ter Heegde, SNV</p> <p>15:00 – 15:30 Coffee break</p> <p>15.30 – 16:30 Summary of first workshop day and expectations of participants, Evelyn Brudler, Jan Lam and Felix ter Heede</p> <p>18:00 – 20:00 Get-together Dinner, participants from Biogas Compact Workshop meeting participants of Alumni Seminar. Location to be announced</p>
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<p>Tuesday, 8.4.2014</p>	Morning
	Technology
	9:00 – 10:30 Technical Aspects of Biogas: Plant Types / Designs and Design Choices, Parameters ; Jan Lam, SNV
	10:30 – 11:00 Coffee Break
	11:00 – 12:00 Plant dimensioning calculations Felix ter Heegde, SNV
	12:00 – 13:00 Domestic Biogas Appliances: Design & Performance Jan Lam, SNV
	13:00 – 14:00: Lunch Break
	and Change to Campus Wechloy Building W0, Energielabor; Bus 306, Terminal Bus stop
	Afternoon sessions:
	Venue at Campus Wechloy Energy lab and other facilities
	Networking group meeting or
	14:00 – 15:30 Practical Session or, first Set
	Group A: Biogas stove efficiency test - Jan Lam , – Location: Campus Wechloy, Building W0, Energielabor; Bus 306, Terminal Bus stop
Group B Biogas stove efficiency test – Felix ter Heegde – Location: Campus Wechloy, Building W0, Energielabor; Bus 306, Terminal Bus stop	
Group C Flow and Mixing in Biodigesters - Udo Kulschewski - Room: W2 1-187	
Group D Inspection of Students' lab Digester, Sensors, and Analysis – Ms. Tanja Behrendt – Location: Campus Wechloy, Building W0, Energielabor; Bus 306, Terminal Bus stop	
Group E Visit to Lab Facilities of the Master Course <i>Postgraduate Programme Renewable Energy</i> ; Ms. Evelyn Brudler Location: Campus Wechloy, Building W0, Energielabor; Bus 306, Terminal Bus stop	
Group F Working group; to be announced	
15:30 – 15:45 Sorting break for Practical Session:	
15:45 – 17:15 Practical Session, Second Set	
Group A: Performance Testing of Biogas Stoves - Jan Lam , – Location: Campus Wechloy, Building W0, Energielabor; Bus 306, Terminal Bus stop	
Group B Performance Testing of Biogas Stoves – Felix ter Heegde – Location: Campus Wechloy, Building W0, Energielabor; Bus	

	<p>306, Terminal Bus stop</p> <p>Group C Flow and Mixing in Biodigesters - Udo Kulschewski - Room: W2 1-187</p> <p>Group D Inspection of Students' lab Digester, Sensors, and Analysis – Ms. Tanja Behrendt – Location: Campus Wechloy, Building W0, Energielabor; Bus 306, Terminal Bus stop</p> <p>Group E Visit to Lab Facilities of the Master Course <i>Postgraduate Programme Renewable Energy</i>; Ms. Evelyn Brudler Location: Campus Wechloy, Building W0, Energielabor; Bus 306, Terminal Bus stop</p> <p>Group F Working group; to be announced</p> <p>17:30 Question & Answer, Moderated discussion Grouping for practical sessions for Friday Main Campus by Bus 306; BIS room</p> <p>18:00 Optional: Video: Biodigester Construction</p> <p>18:30 End of Day 2</p>
<p>Wednesday, 9.4.2014</p>	<p>Compact Workshop</p> <p>Morning</p> <p>Excursions</p> <p>EWE-Biogas plant in the village of Wittmund ,</p> <ul style="list-style-type: none"> • Fermentation of agricultural and industrial organic waste • Quality control of the input substrate • Safety Technology • Thermal and electrical energy production from biogas <p>optional EWE Biogas upgrading plant and Audi Power-to Gas plant in the village of Werlte.</p> <ul style="list-style-type: none"> • Biogas upgrading to pure methane for feeding to gas grid • Methanisation of CO₂ for feeding to gas grid <p>Afternoon:</p> <p>Theme: Organic Material & Soil fertility</p> <p>Expert Lectures: from ca. 14h on</p> <ul style="list-style-type: none"> • „Urban organic waste for Bio-digesters – Bio-digesters for urban organic waste“, Camilo Wilches, Company: Biogas Weser-Ems • Influence of fermentation residues on soil quality/humus, First results of the research project; Ms. Carolin Schnepel, PhD researcher Research group Prof. Luise Gianj, • „The importance of remaining of organic matter in the soil to maintain soil quality“, N.N

<p>Thursday 10.4.2014</p>	<p>Compact Workshop</p> <p>Morning: Soil, - continuing</p> <p>9:00 – 10:15 Bioslurry Quality, Applications & Results Felix ter Heegde, SNV</p> <p>10:15 10:45 Coffee Break</p> <p>Mass Dissemination Programmes: The SNV model</p> <p>10:45 – 12:15 The SNV Model for Programme Development: Feasibility Study, Technical, Social, Legislative and Administrative Conditions, Implementation Partners Selection and Tasks. Jan Lam, SNV</p> <p>12:15 – 14:00 Lunch Break</p> <p>14:00 – 15:00 Large Scale Domestic Biogas Dissemination: Development through the Market Set-up and Functions of the Demand, Supply and Regulation sides. Felix ter Heegde</p> <p>15:00 – 16:00 Programme Exit Strategies Experiences from Vietnam, Steven von Eije</p> <p>Open Space IV Discussion with SNV experts</p> <p>Working Groups: Development Aid & Politics, other Working Groups</p>
<p>Friday, 11.4.2014</p>	<p>Compact Workshop</p> <p>Morning:</p> <p>9:00 10:30 Economic tools within Clean Development Mechanisms: Emission Reduction (ER) Calculations, Gold Standard Methodology, Value and Marketing of ERs; Jan Lam</p> <p>10:30 – 11:00 Coffee Break</p> <p>11:30-12:45 Economics Economic and Financial Aspects of Domestic Biogas Return Calculations, Subsidy Calculations and Justification, Steven von Eije, SNV</p> <p>12:45 – 14:00 Lunch Break</p>



14:00 – 15:15 Financing of Domestic Biogas Programmes,
Steven von Eije, SNV

Afternoon:

Open Space V

Gathering Seminar Results

- Transferability of the concepts presented "Water, Energy and Hygiene" on Rural and/or urban areas: Mass dissemination, technical concepts, stakeholders, other
- Cooperation and networking

End of Compact Biogas Workshop