

**Progress on socio-economic aspects of bioenergy systems:
Experiences from IEA Bioenergy Task 29**

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The Task on Socio-Economic Aspects of Bioenergy Systems (“Task 29”; duration 1 Jan 2000 – 31 Dec 2002) is an international collaboration within the IEA Implementing Agreement on Bioenergy. The International Energy Agency (IEA) is established within the framework of the Organization for Economic Cooperation and Development (OECD) to implement an international energy programme. The aim of Task 29 “Socio-Economic Aspects of Bioenergy Systems” is to identify and quantify the socio-economic and environmental impacts of bioenergy production systems. In particular, the Task is seeking to investigate the effects of bioenergy generation – both feedstock production and energy conversion – on the surrounding economic (financial, local industry creation, infrastructure development, regional value added, etc.), social (employment, education, health, etc.), and environmental climate. Thereafter, any identified and substantiated net regional gains and benefits can be used to promote the use of bioenergy to policy and decision makers in areas where the gains can be maximized and most widely felt. Task collaborators collect, collate and synthesise information to fulfill given objectives. In particular, they design and develop easy-to-use tools and guidelines needed to estimate real and complete characteristics and consequences of using biomass instead of fossil fuels for energy. Although the Task is focused mainly on the local/regional level, full account is taken of the overall national and international framework, within which the region must necessarily work. The Task will promulgate its findings and conclusions by means of publications (workshop proceedings, reports and studies) for wide international distribution and will make innovative use of the Internet (downloadable publications and tools, overviews and other communications to be made readily available in electronic form). Industrial involvement will be particularly valued in relation to the acceptance and implementation of systems and guidelines for environmentally sustainable and economically viable use of biomass. A key aim will be to have a significant impact on research and development practice in participating countries in order to achieve the goals of IEA Bioenergy and also to support other connected international initiatives on sustainable development. Task leaders, appointed by the Operating Agent (Republic of Croatia) direct and manage the work programme together with National team leaders from six participating countries. The participating countries are Austria, Canada, Croatia, Japan, Sweden and United Kingdom. In addition, a co-operation with FAO was established and Finland is expected to join during 2001. Slovenia, a country in the process of joining IEA Bioenergy, has also indicated that they are going to participate in the Task.

Special attention is given and linkage will be made to ongoing and planned projects and programmes, which relate closely to the work proposed here, such as those projects identified by the European Commission, IPCC, UNDP, World Bank, etc. Such linkages benefits the Task participants by drawing in additional expertise and experiences, thereby “gearing up” the efforts further whilst ensuring that there is no unintentional duplication of activities.

Task Progress and Activities

The Task has made a solid start at giving a detailed consideration to the value of bioenergy when viewed in the broader context of society, environment and economy. The boundaries of the task have been drawn wide in order to be as inclusive as possible without becoming unmanageable. A two pronged approach of analysis with modeling and community testing with feedback is now commencing and the year ahead is likely to prove a most interesting one for the Task. Current trends at the international (IEA and European Commission) through to the local level would indicate that the importance placed on this kind of work, in a sense to placing bioenergy ‘in context’, is immense. Increasingly, new developments will be expected to demonstrate LA21 and/ or socio-economic benefits in a tangible way. Hopefully, the work of this Task will prove to be an important contribution to showing the multiplicity of benefits that can be derived from sustainable bioenergy and hybrid

renewable energy (where bioenergy plays a significant role) solutions for communities, and in partnership with those communities.

According to the Work Programme, each participating country identified one region to assess all socio-economic effects regarding the use of biomass for energy. Regions for study were chosen so that they are complementary in nature and have a particular broad socio-economic challenge or focus. Bias is strongly toward rural areas however contrasted with urban centres.

Within the framework of overall co-operation between IEA Bioenergy and FAO, FAO has chosen Task 29 as one of the Tasks for special attention. During the joint activities so far, it became clear that both groups have a very similar approach to the socio-economics of bioenergy systems, especially as this applies to the regions. Further activities will be targeted on:

- ?? exchanging experience, data and knowledge,
- ?? participation of FAO representatives in Task 29 activities,
- ?? involving developing countries, with the help and support of FAO, in Task 29 activities,
- ?? the Task 29 internet conference scheduled for the year 2001 will be conducted with collaboration between FAO and Task 29.

The Task is linked to a European Commission SAVE II initiative to establish a cluster of three local energy management agencies in the UK, Spain and Bulgaria. The UK Agency based in the Thames Valley region (a study region for the Task) is acting as a focus for collaboration. Since the Agencies work very much with the local communities they will provide an excellent linkage for data gathering, model testing, community consultation and partnership with events. The Task is also making a linkage with a European Biomass Cogeneration Network, which was established to examine the prospects for hybrid biomass and green waste CHP energy facilities. Again, the focus is at the community level and the socio-economic benefits will be seen as paramount.

Another important initiative proposed by the Task Leader and agreed by the National Team Leaders, is to sponsor one student for each participating country from the Task budget in order to assist the overall programme. These people will participate in data gathering, analysis and the application of models to the regions and will also participate in the final workshop in the year 2002. The initiative will provide an excellent opportunity for young people from the communities under study to participate and exchange ideas. They should provide a 'living link' to the work and actively demonstrate Task commitment.

References and reports available from Task 29

?? Summary and results from the preparatory workshop at Zagreb, Croatia, July 1999

Available at <http://www.eihp.hr/task29/task29/works.htm>

?? Minutes from the workshop at Växjö, Sweden, February 2000

Available at <http://www.eihp.hr/task29/task29/works.htm>

?? Ling, E. (2000): Competitiveness of bioenergy - one issue different logics

Available from Erik Ling or <http://www.eihp.hr/task29/task29/works.htm>

?? Minutes from the meeting at Brighton, UK, July 2000

Available at <http://www.eihp.hr/task29/task29/works.htm>

?? Myles, H. and R. Madlener: Overview of existing socio-economic models, September 2000

Available at <http://www.eihp.hr/task29/task29/methodo.htm>

?? Domac, J., Madlener R. and K. Richards (2000): Socio-Economic Aspects of Bioenergy Systems. A New International Research Cooperation within IEA Bioenergy. 1st World Conference on Biomass for Energy and Industry, Sevilla 5-9 June 2000

?? Domac J. (2000): First results of the IEA Bioenergy Task 'Socio-Economic Aspects of Bioenergy Systems', Forestry Magazine, 7-8/2000, 413-420, Croatian Forestry Society

?? Minutes and proceedings from the workshop and meeting in Alberta, Canada, May 2001

Available at <http://www.eihp.hr/task29/task29/works.htm>