

Energy and the Environment in early modern northern Europe

**24. Minisymposium des Zentrums für Umweltgeschichte
In Kooperation mit dem Institut für Geschichte der Universität Wien**

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From the end of the Middle Ages to the Industrial Revolution the energy regime in northern Europe went through extensive adjustments. Solar energy was always the ultimate source of power. The rise in the use of coal and as much or more in the use of wind and waterpower expanded the range of carriers beyond the traditional sources of calories from foodstuffs for people and animals and from firewood. Changes in technology, the evolving structure of transport costs which favoured some suppliers, and changes in consumption patterns all contributed to this change. The efforts to measure the shifting pattern of energy use face considerable methodological problems. One is estimating the amount of work done by wind power. That source had the advantage of minimal environmental impact but that fact also means it left no footprint. The inability to measure exploitation of wind power has led to underestimation of its contribution, one principally to the rapidly growing shipping sector. A second problem is connecting new consumer demand to environmental impact. The rapid growth of the Dutch brewing industry in the fifteenth and sixteenth centuries offers an opportunity to measure energy use and to assess what the shift to making more beer did to a very vulnerable environment. A third problem is evaluating the replacement of firewood by coal. Long considered a hallmark of the transition to a modern economy and long considered a result of the destruction of the environment by overharvesting of trees, closer examination reveals a much more complex history stretching back into the late Middle Ages. Each of the three problems indicates the pitfalls and the potential for the measurement of total energy use in early modern Europe, an important element in evaluating the changes in the relationship between Europeans and their environment up to around 1800.

Prof. Richard Unger, Ph.D. (Yale) teaches Medieval and Early Modern Economic History and the History of Technology at the University of British Columbia, Vancouver. He is currently completing a study of the depiction of ships on maps, their accuracy and their purpose, in southern and in northern Europe before 1550. He is also engaged in a study of the relationship - economic, political, cultural - between the Dutch Republic and the Baltic region from around 1400 to around 1800. Through cooperation with a group of researchers from different parts of Europe, he pursues a study of energy sources, their uses and the environmental impact of the distribution of sources of energy from the Renaissance to the present.

Zeit: Mittwoch, 29. Oktober 2008, 18.00 bis 20.00

Ort: Universität Wien – Institut für Geschichte, HS 45

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