

BP Amoco's Greenhouse Gas Audit Sets the Stage for Industrial Companies Worldwide

For its global operations, BP Amoco recently developed the first-ever, corporate greenhouse gas (GHG) emissions auditing protocol consistent with international financial and accounting standards. The study, performed by a three-company team that included ICF Consulting, is expected to lead the way for industrial companies seeking to develop auditing and internal trading practices in response to rising international concerns about GHG emissions—including CO₂ and methane—and their impact on climate change.

The audit was conducted to determine BP Amoco's progress toward its GHG emissions-reduction goals and to support its internal GHG trading system. BP Amoco currently collects and estimates direct and indirect GHG emissions at all upstream, downstream, and chemical business units. The team developed an audit process and institutionalized it through the preparation of internal audit manuals and checklists. The company's internal trading system works as most government-regulated air-quality trading systems—except that it includes only BP Amoco facilities around the world and is voluntary, given that there are not yet any global GHG emissions standards. The improvement in GHG data gained from the audit findings also will prepare the company for external emissions trading if opportunities for that arise in the future. The audit evaluated GHG emissions data on the company's reported GHG emissions for 1990 and 1998 baselines. The team conducted more than 32 site audits of its largest emitting business units, which represented the vast majority of its corporate GHG emissions. An independent expert panel—which included members from government, non-governmental organizations, academia, and the United Nations—advised and challenged the project, ultimately improving the final outcome.

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BP Amoco is a pioneer in GHG auditing and the first major multinational company to seek an independent GHG audit. Recently, Shell International also has developed its own internal GHG trading system for facilities in industrialized countries. Texaco and several other oil and gas companies are in the process of developing GHG emissions audit protocols and internal corporate baselines in preparation for developing internal trading systems. BP Amoco shares the insights it has gained in GHG auditing at industry conferences and on its Web site at www.bpamoco.com.

BP Amoco discovered that a key issue for its audit—which will likely be a problem for many other companies conducting GHG audits of retrospective baselines—is that past data are not as complete as recent data. In the case of BP Amoco, emissions data from 1990 were used to establish a baseline by which improvement to the corporate target for emissions reduction could be judged. BP Amoco has cited several other areas in which data estimations and management processes need to be improved, including more unified guidance for methane estimation; more consistent methods of assigning ownership of emissions at facilities shared with other companies; better data from facilities that are owned but not operated by BP Amoco, or that have been sold or closed; more uniform



reporting from contracted services regarding the inclusion of sources, boundary definition, and the treatment of emissions; and improved quality assurance procedures, documentation, and management reviews for GHG reporting.

The audit determined that, despite uncertainties from retrospective data, uniformly applied protocols will make it possible to report GHG emissions without material misstatement.

ICF Consulting, KPMG, and Det Norske Veritas joined with BP Amoco to form the team that conducted the

audit. ICF Consulting's global environmental issues practice is one of the largest sources of expertise on climate change-related issues in the private sector with more than 230 climate-change and communications specialists across its offices worldwide. The company has received a number of international and domestic awards in recognition of its work on climate change issues. ICF Consulting supports public- and private-sector clients on a range of environmental problems and has been actively involved since 1987 in the implementation of global climate change solutions and efforts to establish GHG assessment, monitoring, and verification standards. 