The following is a summary of the EPA Climate Leaders Workshop. We have attempted to capture the presentations, questions, and comments. Presentation slides are available on the Climate Leaders website (www.epa.gov/climateleaders). The following is not a recorded transcript.

EPA Climate Leaders Workshop – January 13 and 14, 2004

Day 1 – January 13, 2004

General Session

Introduction to the Climate Leaders Program

Scott Johnson, SC Johnson:

SC Johnson is a leading edge company in environmental sustainability, participation with Climate Leaders is a big part. EPA has provided all the support needed, is knowledgeable, reliable, motivational, and flexible in meeting SCJ's needs. SC Johnson plans to meet their goals using an innovative cogeneration unit using landfill gas.

Question and Answers

Q: What was the return on investment timeframe for the landfill gas project?

A: A little over two years.

Kristen Zimmerman, GM:

The Energy Star, Green Power Partnership, Natural Gas Star, Landfill Methane Outreach Program, Waste Wise, CHP Partnership, Coalbed Methane Program, and Commuter Choice Lead Initiative are programs that GM participates in; all these programs fall under the Climate Leaders Umbrella. Under the Climate Leaders program, partners set aggressive goals with the excellent support of EPA and their contractors and get good publicity at the same time.

Based on a question that was raised, GM indicated that they do measure shifting of jobs (hence emissions) overseas. Johnson and Johnson pointed out under the WRI/WBCSD protocol (GHG Protocol), there is no gain by doing this as far as the GHG inventory is concerned, as the base year emissions would need to be adjusted to reflect the shift operations.

In addition, in response to a question as to why absolute vs. intensity goals were chosen by GM, Kristen indicated that the company felt that they can control absolute emissions.

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Welcome: John Beale, Deputy Assistant Administrator, Office of Air and Radiation, EPA.

US Revenues among all current 54 Climate Leaders partners represent 6% of GDP. Based on targets set thus far, on average, Climate Leaders partners will reduce 7.5 million metric tons CO2e more than those in their respective industries, which is equivalent to a reduction of 5 Million cars.

John complemented all for participating in the workshop, and encouraged companies who haven't already to join Climate Leaders.

Janet Ranganathan, Overview of Revisions to WRI/WBCSD's Corporate GHG Protocol and Update on Project Protocol

Overview of Main Changes to the 1st Edition:

- Setting organizational boundaries companies choose between equity or control for reporting purposes (comes into play if don't wholly own entities) and use the same approach across all operations. Recommend accounting for both (to maintain flexibility among the various programs), but only reporting under one. Two added criteria to the definition of control (financial and operational), and quantitative threshold removed under the equity approach.
- Leases, outsourcing, and franchises Whether a company includes these sources in their
 inventory depends on equity share, financial control, and operational control approachclearer guidance provided. For example, if recorded as wholly owned and reporting per
 financial control, then report 100% of emissions, whereas if operated per the lessee's
 operational policies and reporting per operational control, then report 100% of
 emissions.
- Setting operational boundaries Scope 2 and Scope 3 clarification with respect to purchased electricity, i.e. purchased for own use (Scope 2), etc. Scope 2 applies to the end user only. Purchased electricity for resale to end user is Scope 3 (or supplemental information if resold to intermediary).
- New chapter on Inventory Quality Defines an inventory quality program framework, as well as introduces the concept of uncertainty (i.e. uncertainty can often be ignored when comparing emissions over time).
- Accounting for GHG reductions internal (captured in inventory) and external projects (captured separately) project reductions, accounting for green power.
- New chapter on voluntary GHG targets i.e. absolute vs. intensity, global vs. domestic, direct vs. indirect, base year, period etc.
- New appendices on the electricity sectors, carbon sequestration.
- New distinction between "should" vs. "shall" throughout the updated protocol.

• Revised standard expected in February, now in final editing and design stage. For most players, the new edition should not result in significant changes in the inventory.

Draft Project Quantification Standard

- Quantification steps eligibility check, additionality (per requirements), baseline, calculations, ownership classification, monitoring and verification
- Baseline: project specific, performance standard, retrofit
- Road tested three different approaches (project specific baseline, performance standard, etc)
- Next steps: Complete road test assessments (30+ participating companies), stakeholder and road test meetings – January 2004, form Revision Mgmt Team, WDCSD synthesize feedback and recommendation, revision mgmt team mtg., redrafting, revision mgmt team approval, and first edition published (likely the end of 2004/early 2005).

Other Miscellaneous

- Revised guidelines to be translated in French, Japanese, Chinese, Spanish, and Portuguese
- New CHP, HFC and uncertainty tools; work to begin on electricity sector tool; improvements to existing tools
- Capacity building in developing countries: India, S. Africa, Philippines, and Mexico
- Newsletter produced every 2 months

Question and Answers:

Q: Please discuss the updates in the handling of emissions associated with transmission and Distribution (T & D) for the audience.

A: These emissions shall be reported as Scope 2 for the T&D company. Exception – Japanese companies use both emission factors that include and emission factors that disclude T&D.

Q: What about leased vehicles?

A: Depends on the type of lease. Follow the financial reporting or operational reporting decision process.

Q: To what extent do you expect there to be harmonization with EU Emissions Trading Scheme and the ISO GHG verification standard?

A: The overlap of participants helps. Really, this is still a work in progress. There is mutual learning between us. ISO has committed to making their standard as consistent with the GHG protocol as possible. They will debate the same issues we did; depending on the players, the answers may differ. WRI/WBCSD will at least share their views as to why they have chosen to take the routes they have chosen. Not expecting vast differences.

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Q: For the companies involved in Climate Leaders, when would the project modules come into play?

A: If the projects are already accounted for in the inventory, would not come into play, unless thinking about selling the projects to another party. Otherwise will be addressed on a case by case basis.

Margot Anderson, DOE: Update on DOE's 1605b Revision Process

President's February 14, 2002 Directive for the U.S. to reduce GHG intensity by 18% by 2012 was the impetus for the revision of the 1605b program (as well as to respond to criticism around verifiability, reliability, and accuracy). Reporting program for both emissions and reductions. The objective to balance flexibility with stringency, recognize contributions toward the President's goal, encourage reporters (especially large emitters) to provide a more accurate, consistent, and complete record of emissions and reductions, ensure data is transparent, and to create a "central Federal program" for recording achievements associated with voluntary emission reduction programs, such as Climate Leaders and Climate VISION.

A one day workshop was held yesterday to receive comments on the general guidelines released just before Thanksgiving 2004, making it the 7th public workshop held on the topic. Also have led extensive interagency staff level and policy level consultation to draft the November 2003 guidelines, met and continue to meet with numerous stakeholder groups, interagency groups, EIA (reporting forms and instructions).

New emphasis on entity-wide inventories in order to register reductions occurring after 2002 (forward-looking, entity-wide, reductions across the footprint, not single projects). Entity definition is flexible, however the definition needs to be consistent and compatible with other programs. This, as well as the forward-looking 2002 date were among the issues receiving substantial comments at the workshop yesterday.

Small entities are eligible to register reductions for actions taken without filing full entity-wide reports, although other reporting requirements apply.

Companies are encouraged to report at the highest level, but may report at a lower level.

CEOs are required to sign reports, maintain records for three years. Independent verification is encouraged, but not required. Feedback also received on this yesterday, as well.

General guidelines in public review until February 3, 2004 (considering an extension). Plan to issue revised General Guidelines and Technical Guidelines for combined review in late spring/early summer. EIA will go through public comment period for revised forms and instructions, summer 2004. Plan is to initiate the new program in 2005 (Using 2004 data).

http://www.pi.energy.gov/enhancingGHGregistry

1605bgeneralguidelines.comments@hq.doe.gov

Question and Answers:

Q: What is the role of the DOE and the role of EPA and why do you develop different programs? Who is the first competent authority?

A: Voluntary action programs work with companies and trade associations to undertake commitments to reduce GHG emissions. 1605b is the legally mandated program for reporting GHG reductions to the Federal government. This program has been a reporting/registering vehicle in the past, and will continue to be so in the future.

We are a partnership – there is no one responsible agency – each agency has their own missions. EPA looks at it from an environmental viewpoint, DOE from the energy viewpoint, etc.

Q: If the 1605b is the legally mandated reporting format, will Climate Leaders adopt it?

A: Climate Leaders is suggesting that companies report in 1605b. 1605b needs to be friendly to all the programs out there.

Q: There are a plethora of voluntary environmental programs. As I understand it, 1605b is a registry to document emissions and reductions (statement).

Q: How has DOE defined intensity for a diversity of manufactured projects?

A: Recognize that there are a variety of ways to come up with an intensity metric, i.e. by business line – we are flexible (prefers one based on production vs. economic factors), but are willing to work with companies, especially those that are heterogeneous (won't mandate intensity, metric denominator specifically).

Mike Walsh, CCX: Update on Chicago Climate Exchange (CCX)

All members inventory Entity-wide: includes direct major emissions

They are starting with a limited number of eligible offset projects.

All members' baselines audited by NASD

They have a web-based electronic trading platform. CCX is a self-regulatory organization overseen by Committees comprised of exchange Members, directors and staff

December 12 – activated the trading platform. Steady bids and offers, frequent trading around \$1/mt CO2.

Structure, legal commitments, formal auditing and verification, etc. was missing in the U.S. previously.

Question and Answers:

Q: Can you say anything about the nature of the trades to date?

A: To date, the only trades have been initially allocated allowances (no offsets registered just yet – going through the verification on that right now).

Q: How much trading has occurred since December 12?

A:It has been modest. Expect it to slowly ramp up over time.

Tom Kerr, EPA: Corporate GHG Accounting - Moving Toward Harmonization?

National Developments: EPA Climate Leaders, DOE 1605b reporting, Climate VISION sector agreements, Chicago Climate Exchange.

International Developments: Kyoto (uncertain); EU, Canada, Japan still moving ahead with emissions trading schemes; ISO GHG Accounting Standard; WRI/WBCSD GHG Protocol; World Economic Forum (WEF) GHG registry announced at COP-9.

State Registries in place: CA, NH, NJ, WI - California Climate Action Registry one to watch. Under development - New England, IL, MA. GHG reduction mandates - MA, NH (CO2 cap and trade schemes moving forward), etc.

How companies can help to harmonize standards: comment on 1605b guidelines; comment on Climate Leaders draft protocols and reporting requirements; join the U.S. Technical Advisory Group (TAG) and provide comments on the emerging ISO standard; get involved in industry trade associations on GHG protocols; put pressure on various efforts to harmonize.

Climate Leaders Partners benefit by receiving updates via the Climate Leaders Newsletter, "Carbon Copy", e-mail updates with breaking news, twice yearly Partners meetings, website, etc. Can also contact:

Tom Kerr 202-343-9003 kerr.tom@epa.gov

Question and Answers:

Q: Agree that we all need to encourage folks to comment on the various programs under development.

A: ISO's goal is to provide maximum flexibility. As such, ISO is currently providing a rough outline of what to report, but not how to report it. There needs to be additional guidance provided if ISO wants to be seen as credible.

Wiley Barbour, ERT: Update on Environmental Resources Trust's GHG Inventory Verification Guidance

Tier I, II, and III Verification – different levels of review and documentation depending on the end use. Tier I is more of an internal QA/QC review (bigger fundamental errors, routine error checking procedures, etc.), whereas Tier III refers to independent 3rd party review (field audit of key facilities, re-compute estimates, review alternative quantification

methods, etc.). Tier III is appropriate, say, for external emissions trading. These tiers are unique as compared to ISO 14064.

Key verification parameters include organizational and operational boundaries, quantity, activity, normalization, emission factors, QA/QC, baseline issues, data management.

The document is almost complete and ready for public review and comment. Since the last workshop, guidance has been added for companies with many identical facilities, a decision tree has been introduced for selecting facilities to be audited, and selection criteria proposed based on numeric thresholds or "triggers" (i.e. trigger 1 refers to cumulative emissions, trigger 2 refers to specific verification parameters).

Next steps: circulate draft document for expert peer review and public comment, by February 13, 2004. Assist companies in field-testing procedures, and expand coverage to projects.

Question and Answers:

Q: How do you see this being used in conjunction with the WRI/WBCSD protocol? Also, this seems different from my reading of EPA's IMP?

A: Not inconsistent with anyone's guidance....simply trying to describe the process of verification under various levels. The hope is that various programs will indicate that they need a certain "Tier" of verification. Also, companies can specify more clearly what type of verification they need, using the same terminology across the board. Process is program neutral.

Q: Are you working with any NGOs or Climate Groups to develop this verification guidance?

A: There is a lot of guidance at the Tier III level, but not much at the lower levels, therefore look forward to receiving comments across the board on this document.

Q: It is important to get buyoff on this document, especially from those involved in the ISO verification (statement).

Q: Have you done a comparison against the ISO verification component?

A: We have looked at the UK program, the CCAR certification protocol, GHG protocol, ISO, etc. It is hard to go through category by category – but none of these other documents really describe how to get there, rather, just provide details on the end goal/result.

Q: Is it necessary to get third party independent verification for Tier 3 (vs. going through the same steps internally), i.e. to have tradable credits?

A: On a technical basis, it is possible to go through the same technical steps internally as by an independent third party, however at the end of the day it is a credibility issue for all stakeholders involved.

Cynthia Cummis, EPA: Climate Leaders Partnership Progress Report

Continually growing interest in the program

Wide range of media coverage

Program design almost complete

Currently have 54 partners –20 of which have announced targets. Continually recruit partners at a consistent pace.

Representation of partners by a wide variety of sectors. Highest, by number of partners, is the energy producer sector. By revenue, is dominated by the automotive industry. Partners combined U.S. revenues equal to 6% of U.S. GDP. Based on targets set to date, projected reductions are approximately equal to a reduction in 5 million cars.

Finalizing all cross-sector protocols. Many draft sector-specific protocols are available for comment (on website). Will be developing additional sector-specific protocols in 2004 (energy production, aluminum, etc). Finalizing reporting requirements this month.

Plan to continue with partner meetings, press events, carbon copy newsletter, marketing materials, coordination with other corporate GHG initiatives

New activities: implement new reporting requirements, develop reporting guidance, case studies (business case to take action now, GHG inventories, and GHG reduction strategies), PSA (Public Service Announcement) to recognize goals setters – expect to publish multiple publications from March-May.

Encouraged comment on reporting protocols, handouts (PSA, draft case studies, etc.).

Melissa Vernon, Interface: Innovative Strategies to Reduce GHG Emissions

Impacts from mobile sources – their biggest source of emissions, but don't own any of these sources. Implemented a few programs for emissions reductions from mobile sources:

- Trees for Travel: travel agency collects and submits data on air miles; subsequently Interface plants 3 trees for every ton of CO2 emitted. In 2002, 10 million air miles were flown, which resulted in 2,000 metric tons CO2 emitted. As a result, Interface planted over 38,000 trees.
- Company cars: Cool Fuel program. Offsets the CO2 impact from company cars with fuel purchases. Rebate from BP fuel card funds purchase of CO2 offsets – via Climate Neutral Network. Purchased 141,000 gallons of fuel; offset 1,600 metric tons of CO2. Climate and Cost Neutral. Good for accounting also – centralized billing. Their challenge is that BP stations are not available throughout US, i.e. California.
- Interface Europe: 7 bands allocated by job level (emissions and life cycle cost). Life cycle cost (pence per mile). Cash allowance for choosing lower band.
- Employee Commuting: Clean CO2mmute program voluntary contribution to offset emissions 100% participation at site, for only a \$6 per employee contribution.

• Product Transportation: Participations in EPA's Smartway Transport Program. They provide Anti-idling programs, etc. Also participating in Business for Social Responsibility's (BSR) Green Freight working group, internal working group. Met with top 5 carriers – i.e. schedule deliveries outside rush hour times in Australia, pack trucks as much as possible.

Question and Answers:

Q: Could you contrast your efforts in this program with your efforts on the manufacturing end.

A: Been making strides in energy efficiency, landfill gas projects, etc.

Q: What kind of response have you had from the truckers?

A: It has been a big challenge. The BSR has helped a lot to bring truckers and big shippers (i.e. Home Depot, IKEA, etc.) together – big shippers have more "muscle".

Q: Clean commute - how do you get employees to buy off on this type of program?

A: It helps to show employees how they are helping the environment. They like the "take home messages".

Q: Where do you foresee harvesting the most benefits now.

A: Biggest reduction from the landfill gas reduction project (non-regulated landfill) – use of flares.

Q: Ultimate goal is related to environmental sustainability. Can you put this in numerical terms for 2020?

A:Goal for 2020 is 100% renewable energy – for the rest, trying to reduce it to a bare minimum. Working on a zero environmental footprint.

Mitch Greenberg, EPA's Smartway Transport Program

Many times, emissions from transportation are outside of Partners direct control. Voluntary partnership with the ground freight industry is challenging companies to improve the environmental performance of their freight operations. Challenge is that this is already a very fuel-efficient operation – how to get to the next level?

Emission Reduction Goals: 33 to 66 million metric tons CO2 annually by 2012, 200,000 tons NOx annually, plus PM and air toxics benefits, and 150 million barrels of oil each year (12 million cars off the road).

Three major strategies:

- Corporate Partnerships
- Reducing/Eliminating Idling (i.e. IdleAire Service Delivery Module), bow tails to make the truck more aerodynamic, super single tires (vs. doubles)

Rail

It is really the shippers that strongly urge and encourage the carriers to join the program (i.e. Home Depot, IKEA).

Question and Answers:

Q: If there are multiple customers (shippers), how do you assign ownership for the reductions?

A: Some carriers may want to take ownership of the reductions. Others may not be interested in this, therefore the shipper could inherit the reductions. Case by case basis.

Q: Are you looking at biofuels?

A: Yes, looking at biofuels, such as biodiesel, as well as fuel additives.

Q: Who pays for the IdleAire system?

A: IdleAire charges truckers such that it is cheaper than paying for fuel.

Q: What happens when 2/3 of the shipment is through a certain mode of transportation, then shifted to another?

A: Pro-rated. Intermodal transportation is incorporated in the model.

Q: Is SmartWay working with the carriers to address issues relating to the fuel penalties? Carriers are concerned with the 10% reduction in fuel economy (less fuel efficient).

A: Carriers have to buy new trucks with new engines, etc. As part of the program, requires actions to make up the fuel penalty with whatever trucks they have. Constantly monitoring the fuel economy effect – certainly a factor.

Stephen Offutt, EPA's Best Workplaces for Commuters Program

7B gallons of wasted fuel per year from employee commuting, 20% of GHGs from LDVs. Voluntary business-government partnership to ease traffic congestion, save fuel, and reduce greenhouse gas emissions.

This program aims to reduce single occupancy vehicle commuting by getting employers to offer the "National Standards of Excellence" benefits, i.e. coordinate communication, emergency ride home, one of four primary options (\$30 transit/vanpool subsidy, parking cash out, 6% or greater telecommuting, three or more supporting options).

Benefits to company: recognition, employee recruiting, parking-related cost savings, tax savings, facility cost savings, etc.

Companies from Climate Leaders that have BWC worksites: AEP, BP, IBM, Lockheed Martin, Pfizer, Raytheon, Sun Microsystems.

Top 20 Best Workplaces for Commuters from among the Fortune 500 – list to be released in September 2004. Qualification based on % of work force with BWC-level benefits.

www.bwc.gov

Q: What are the greatest constraints in expanding the program?

A: Employers and the economy. (i.e. if they are currently struggling, they are not ready to embark in a new program).

Kristen Zimmerman, General Motors, Climate Leaders Progress Report

Charter partner – 10% reduction in absolute CO2 emissions in North American facilities (U.S., Canada, and Mexico).

As of 2002, have met a 6% CO2 reduction, and over 7% energy reduction.

GM is focused on energy – energy saving dollars contribute to bottom line directly, energy budget is less than 1% of sales, every \$1,000 saved is equal to a profit margin goal of 5%. Renewable energy is close to 2% of all North American operations (GM). GM is the largest user of landfill gas for energy in the U.S.

Also involved in the WasteWise program (prevention of waste and recycling/reuse). Prevented more than 3,000 tons of waste by investing in new technologies and identifying innovative waste reduction strategies. 4.4 MMT of CO2e prevented from entering the atmosphere due to GM's recycling practices alone.

http://www.gm.com/company/gmability

<u>Lisa Nelowet Grice, CH2M HILL, Designing a High-Quality Inventory Management Plan</u> (IMP)

The Inventory Management Plan is a management system for your GHG inventory. An Inventory Management Plan institutionalizes the process – is a "cookbook" for developing the greenhouse gas inventory. Also helps to improve accuracy, achieve goals, support CIP (continuous improvement plan), and streamline verification.

This is based on real experience with real companies – i.e. 3M indicated that an IMP helped to improve the *efficiency* of the greenhouse gas management program. SC Johnson stated that it is a *sustainable* means of high quality GHG tracking and reporting.

Need to leverage existing data systems (energy data, production data, real estate records, transportation logs, etc.) and integrate with existing programs (ISO 14001: EMS, ISO 9001: QMS, ISO17025: Lab QMS, Six Sigma, Lean Manufacturing, etc.). Use the tools that are already in place that folks understand – speak their language.

See EPA's spreadsheet on how the Inventory Management Plan should be created. Key pieces:

- Organizational Boundaries what is in, what is out
- Operational Boundaries direct, indirect, and optional indirects

- Emission Quantification quantification method, emission factors and other constants, activity data (i.e. fuel use, number of trucks, adipic acid production)
- Data Management data collection, data processing, information management systems, quality assurance
- Base Year Adjustment structural changes (mergers, acquisitions, divestitures, and outsourcing), methodology changes (calculation methods, emission factors, error correction), triggers
- Management Tools roles and responsibilities (i.e. overall program management, individual program elements, program evaluation to goals, sufficiently institutionalized, etc.), training and communication, and document retention and control
- Auditing process internal, external, management review, etc.

Each piece, or element, needs to involve the identification of the roles and responsibilities (titles rather than names), data management, and QA/QC – i.e. who is compiling the data, who is doing the rollup, etc.

The IMP can be in any format that works for you. Could be a web-based tool, a hardcopy manual, or a supplement to existing web-based or other tools.

Question and Answers:

Q: Surprised that there is not already a third-party software tool to implement this in a standardized way....although it makes sense that it should be individualized, it also seems to make sense to standardize...most IMPs will look the same. Already have a 14001 management system in place at Kodak – want an off-the-shelf software tool.

A: There are some in development. Some companies are using CARROT (the California Climate Action Registry's Climate Action Registry Reporting Online Tool)

. The key is that this is more than just a data collection tool – it is more of a *process*. Will share knowledge off-the-shelf software tool information later.

A participant indicated that they started with FoxPro – into Oracle 9i. Really can build the framework into whatever database the company supports (statement).

Harry Kauffman, Johnson & Johnson, Implementing an Inventory Management Plan

IMP is not that hard! Don't wait for every piece to be perfect - simply use common sense.

What you need to know: What GHGs to include, which facilities to include, what is your base year, what sources to include, and how to account for change.

Resources available: WRI/WBCSD GHG protocol, Climate Leaders GHG inventory protocols, Climate Leaders inventory management plan checklist, EPA consultants, other consultants.

De-centralized, but establish clear basis for reporting. Their IMP is only approximately 20 pages long!

Will take less than ½ hour to report under Climate Leaders, because of this process in place.

Plan cannot be static – need to review and update protocol annually, review and update GHG tracking system annually, implement actions and determine results, and report the results both internally and externally.

Question and Answers:

Q: What was involved in figuring out that the 2% emissions were not going to be included in the J&J inventory? Utility summaries – actual bills?

A: HFC was one area. The small offices around the country was another. The biggest component was aircraft fleet (1.25%). Estimated or used actual data to estimate the emissions and compared it to the bottom line.

261 companies maintain data from the bills, and at the end of the year, they report their annualized usages to COR.

Q: Don't have a formal 3rd party verification procedure. Rely on the 261 facilities inputting data. How do you know that the numbers you are getting make sense?

A: 98% of facilities are ISO 14001 certified. In addition, that database has its own checks built in, and there are a second set of checks at the COR level to makes sure the data makes sense. Really boils down to a common sense thing.

Q: Small sources, i.e. small offices building, HFC emissions, etc. What sort of a target do you set for deminimus?

A: Going in there was no pre-conceived notion as to what that would be. Decided after looking at the big picture – common sense perspective, again. Small sources were documented (process and specific documentation) to EPA to ensure transparency. Can't get so caught up in the details that you can't move on – have to get into the details and get out.

<u>Kenneth Martchek, Alcoa: Measuring, Reporting, and Verifying Greenhouse Gas</u> Emissions

Verification indicated that data was being entered in incorrect units, etc. therefore Alcoa developed better guidance for sites on GHG documentation, etc., and the sites needed to do a better job of documenting who entered the information and how, and identified ways to leverage the existing ISO 14001 system.

Question and Answers:

Q: when did you start the baseline?

A:1990 baseline. However, did not dig back into those records until 1993/1994 for PFC emissions, and 1996/1997 for the rest. This system was not in place until 2001. The same system is used for all environmental health and safety data as well, not just GHG data.

Q: How often do you get information from the facilities? What percentage costs are associated with each of these components?

A: Require the full set of EH&S metrics each quarter. In terms of cost of goods sold, e- costs are 30%, rolling mill would be significantly less, etc. – depends on the part of the value chain that you are in.

Day 2 - January 14, 2004

General Session

Eric Kuhn, Cinergy: How to Develop and Internally Sell a GHG Reduction Target

Internal buy-off from top down (CEO down to direct reports and further down the chain).

Key steps for goal implementation: Complete emissions inventory, define emissions footprint for baseline, develop quality criteria for offsets, review quality of offsets, independent third party certification of baseline, communication and reporting (both internal and external).

Arrived at the target via modeling (environmental, market, etc).

Question and Answers:

Q: Is your goal absolute? If so, how does that compare/contrast with the 18% goal in VISION? Where does the \$21M cost come from, especially if switch from coal to NG (i.e. included, additional economic burden on end users)?

A: It is an absolute reduction, however also made a commitment to report it as an intensity goal. Know have to add scrubbers in the future (takes away from the net Megawatts generated that can be sold – parasitic load), that will increase the intensity factor over time (may not reach the intensity goal without purchasing additional offsets, but will meet the absolute reduction goal).

Don't anticipate fuel switching on the main generators. Are looking at repowering the older, smaller generators (approximately 100 megawatt units) with natural gas. This will come out of shareholder pockets.

Did not worry about comparing the goal to the 18% administration reduction – viewing Cinergy's goal as a specific goal for a specific company, and view it as a significant goal, which will be a contribution toward a natural goal.

Q: Why isn't Cinergy advocating for legislation?

A: We are advocates of a voluntary program, not legislation. The main reason is because there is no bolt-on technology to reduce emissions. We also see offsets as part of the process, but don't want to rely on offsets (alone) to meet our targets. Don't agree with spending a lot of money early on to implement legislation; would rather spend that money for R&D on long-term emission reductions.

Q: Can you talk about the scope of your organization that was involved in the target setting? What was the level of effort?

A: The scope involved all of the emitters in the company (regulated and non-regulated business units). Involved more of the non-regulated business units, since that is where most of the emissions are, although the regulated units were included. Included the CEO, his direct reports, and their direct reports. Senior analysts, marketing folks, analysts from the trading/sales group (vs. the commercial analysts). Also relied on ICF for the IPM model to model the environmental regulation scenario planning. There were differences between the commercial internal modeling, IPM, and our own engineering groups modeling, therefore had to bring in the various players to come to common ground (where most of the manhours were spent).

Q: Hear that the electric power industry will make significant windfall profits from a mandatory cap-and-trade system...do you feel that your industry will be best suited under a voluntary program vs a mandated system?

A: Disagree with the premise of the statement. Under a cap and trade system, there is an auction of the allowances (in discussion in this country – billions of dollars) vs. a grandfather or granting of the allowances, then there is actually a devaluation. Don't foresee that electric utilities will be granted a full set of allowances. In Eric's opinion, there will likely be an auctioning of allowances – will be neutral both ways. This is really to be determined in this country; likely won't be comparable to the current system in Europe.

How to Develop and Internally Sell a GHG Reduction Target: Derek Guest, Eastman Kodak

Very visible set of HSE performance goals, GHG being one of them.

Goals driven by Kodak's Corporate HSE policy, vision of HSE responsibility, and Kodak's responsible growth strategy. Goals supported by ISO 14001 registered HSE management system at all major manufacturing operations worldwide, and corporate HSE management system.

Their approach was more bottom-up, although it was important that the CEO bought off on the approach. Implementation involved long-term corporate HSE strategy approved by CEO, conducting workshops, etc.

Absolute goal because the mix of product development is changing so rapidly (would have been difficult to establish a realistic denominator), i.e. moving toward digital imaging. However senior management is mindful of the intensity goals the Administration has set, therefore will re-evaluate this on an annual basis.

Question and Answers:

Q: Is the GHG goal geared toward manufacturing?

A: It was. However, plan to follow the GHG Protocol, therefore are looking at all the significant elements. Likely employee travel, and other sources will be de minimus, therefore manufacturing is the larger source.

Q: What year is the baseline set for? How much of the goal is based on the Rochester site?

A: Baseline year is 2002. Likely around 70% are from Rochester - only one that uses coal-fired boilers. Abandoned the plan to convert to NG, due to the cost of NG (very seriously thought about with the CEO). With the current 10% goal, it is largely based on energy-intensive projects, not due to switch-overs (besides landfill gas projects). Really looking at energy productivity gains.

Q: Can you share your experiences with Kaizen events with the others in the room? How are you applying this toward GHG reduction target?

A: Developed a Kodak operating system (similar to the Toyota operating system), with various tools, Kaizens being one of them. Building energy reduction into all Kaizen activities. Achieving some very amazing results from this.

<u>Developing an Effective Energy and GHG Data Tracking System, Christopher Powell, United Technologies Corporation</u>

Needed a GHG reporting system – 220 sites and growing, 7 operating units and growing, and previously, no other single repository for data was available. Initially had 220 separate excel spreadsheet templates – each file had to be checked.

Currently, every site has an EHS coordinator or manager. System has checks and balances (i.e. units checking). Issues included requiring better coordination with facilities and procurement personnel, lack of technical knowledge on the subject (energy and energy conservation typically not core EHS function, basic knowledge of reporting terms, i.e. therms, kWh).

Over time, eliminated excel spreadsheets all together. Currently is a 75% Oracle 9i web-based system (each site can enter the data onsite, with error-checking built in). Once data is collected, calculation of emissions is conducted in a centralized system (corporate roll-up). Future plan is to make this 100% web-based (currently have some web access issues in some countries).

Benefits: accurate data, much less manpower, more analysis and tracking tools for operating unit personnel, flexibility (i.e. quarterly reporting capability where corporate only requires annual reporting). Data turnaround process went from weeks to days!

Have tried to incorporate as much of the components of the management plan into the system as possible, i.e. emission factors.

Question and Answers:

Q: Are you also generating external reports? Are rules for acquisition and divestiture built into this system? Did you find it challenging to set up data flows from all the various sources (companies)?

A: Built into due diligence and compliance program. Managed at the COR level, rather than the site level.

It has proven to be a lot easier (excel form was emulated through the web), and the built in checks really helped to minimize the errors. Also provided training in two ways (internal seminars on a regional basis and instruction manuals for the program, and put out FAQs on the web itself). Every issue that has come up since the program started is included on the web – this is augmented every year with new questions.

Q: How did you overcome reporting more than once to various internal entities (i.e. gas usages).

A: Don't really get many of these complaints. Really stress that the data needs to be collected, anyway, and really is just a matter of a few minutes to enter the data into the system.

Q: In the process of updating the 1605b database. Did you integrate legacy data into the new Oracle 9i database. Also, do you have pre-set Oracle reports?

A: Haven't switched over to the report-writer function of Oracle, yet. Currently working on rolling it out. Right now using an excel-based tool – but it gives drop downs for macros to develop the reports. The plants are happier to not have to rely on COR to develop reports.

Q: Who owns those emissions (on government contracts)? Do you have any constraints on DOE? Can those contracting entities (DOE, NASA, etc.) say that they want to see the database?

A: Required to gather government-owned fuel data, but is rolled up to the COR level, and not available externally. Internally is available to the staff. Have not heard of any issues of security, etc. Hard to relate fuel usage to specific sources, since it is a rolled up number, anyway.

<u>Discussion of New Climate Leaders Reporting Requirements: Vincent Camobreco and Jim Sullivan, EPA</u>

EPA expects that anything that is reported at the entity-level under Climate Leaders will be consistent with 1605b. The IMP under Climate Leaders is likely above and beyond what will be required under 1605b.

The goals for the program are to create a high-quality inventory that will be maintained over time, while limiting Partners' reporting burden and providing flexibility, as well as providing EPA with the confidence needed to provide high-level recognition through a voluntary program (key to the program and Partners).

A year ago, very detailed reporting requirements were rolled out. Based on Partner feedback, in June 2003, three reporting options were rolled out. Main concerns in June involved an implied credibility hierarchy, and although Partners liked the idea of the IMP, some that didn't have one felt that it would be difficult to accomplish in one year. This, plus other feedback resulted in the current reporting requirements.

The new proposed reporting requirements involve one approach. The key focus is the IMP. It is highly encouraged that companies submit detailed entity-wide facility-level data (although it is no longer required), require facility-level data to be reviewed from one facility during the "onsite IMP review".

See flow chart and other handouts for details on what is required in the base, interim, and goal years as far as reporting. The key feature is the technical support (contractors to help partners with the reporting protocol, help identify boundaries and emissions sources/factors, desktop facility-level data review if a partner prefers), onsite IMP review at one facility, and the submission of the IMP data. Although entity-wide facility-level data submission is not required, EPA highly encourages Partners to get their entity-wide facility-level data reviewed (desktop or even onsite at headquarters, if there are confidentiality issues).

IMP – 30 components total, broken into 7 main categories. Of these, 21 are required in the first year, 7 can be implemented over time, and 2 are optional. The key is that it can take different forms for different companies – good internal documentation will help to institutionalize the IMP.

Corporate-level inventory data – summary data. Broken into domestic and international emissions (optional), as well as direct, indirect, and optional emissions, each broken down even further. In addition, the base year and base year adjustments are documented, which allows tracking of changes over time. Offsets can also be reported. Biomass data needs to also be reported, but are not included toward the bottom line number. HFCs and CFCs reporting are optional, but again are not included toward the inventory total.

Partner and EPA will then work together to choose a site for the onsite IMP review (i.e. sites representing the largest emissions, site with the most types of emissions sources, or the site where the most technical assistance is needed). In 90% of the cases, most sites will jump out as far as which to choose and what should be focused on. The focus on the site review will be key data, assumptions, and methods, as well as suggested improvements. In most cases, the contractor (not EPA) would conduct the review.

Suggested Reporting timeline:

Inventory support/gap analysis (1-2 months)

IMP document and review and corporate level inventory data (3-6 months)

Onsite IMP review (6-12 months)

3rd party verification alternative: Partners can submit an auditors report from third party verification along with the corporate summary form. Suggested that the Partner provide the IMP checklist to the verifier to ensure each element is covered in the verification.

Beyond the goal year, EPA will work with the Partner to select a new goal, and the goal year becomes a new base year.

Question and Answers:

Q: Good for companies to document both direct and indirect emissions, rather than a net number. However, one concern is that Partners would want to ensure that the data is credible for outside stakeholders. Although this new reporting appears to be quite credible, it seems that EPA is going through great lengths to avoid having to report detailed facility level data, having the contractors not walk away with the data, etc. which may pose an issue in the future.

A: EPA is still recommending that Partners provide the entity-wide facility-level data for desktop review. However, given the rollout of the IMP and the onsite review, and ensuring that a good, credible data management process is in place, it is less important to actually get the numbers.

Q: Second these comments. Are there any Partners that are undergoing 3rd party verification?

A: Yes, but EPA will need to review the verification reports and ensure they covered the IMP elements.

Q: Biomass CO2 is reported separately – assume that is not included in the total? Output values to calculate intensity – list of what folks can use? Electricity purchased for resale – does this also include electricity generated for resale?

A: Biomass is reported as supplemental information as its own line item – not included as a bottom line number. No list of intensity output values – really up to each company. There is a line item for pass-throughs – plan to follow the WRI/WBCSD approach. Still considering tracking the kWH, not the emissions. As far as tracking emissions associated with non-utility sales of electricity, company would track associated emissions separately.

Q: Would be happy to provide her sample IMP if anyone would like to see it. Agrees that listing the facility information is a good thing.

A: EPA will make a sample IMP available through the website.

Q: Is the auditor report the same as the one that a company (3M, in this case) has already submitted, or a different one? Is there written guidance on what the auditor report should look like, as they vary across the board? Is it a possibility to conduct a 3rd party verification for the base year, and a desktop review in the target year?

A: EPA would be looking for an auditor report of the base year that addresses all the components of the IMP, i.e. what they looked for and what the findings were.

Yes, it is possible to switch approaches from the base year to the target year (as far as 3rd party verification and desktop reviews).

Q: Define "source" for process fugitive emissions.

A: A description of the process involved, i.e. calcination, etc. (category of source).

Q: If a company does not want to submit facility level data, can a Partner combine a facility level data review and an IMP review during the same visit?

A: Depends – the facility level data review would be done at the COR level, whereas the IMP review is envisioned as a true facility level visit. If both can be reviewed at the COR level, there is no reason why it couldn't be done at the same time.

Breakout Session

Reporting Breakout Groups Summary

1.) Are there any companies that can't meet these proposed reporting requirements?

No, as long as there is sufficient time, the reporting requirements could be met (see question two on proposed reporting timelines).

Some companies felt there needed to be more guidance on the verification option in order for them to determine if they could reasonably choose that option.

2.) Are the proposed timelines for reporting reasonable?

The general consensus is that the timelines for reporting need to be flexible. There are many different factors that make it hard to define one timeline for all companies. For example:

- Current level of data collection / inventory process
- Number and types of different emissions sources
- Level of internal resources available to commit to the inventory process

Companies thought it was good to have guidelines for new partners as far as what the expectations are, but need to maintain flexibility for companies that have large or unique sources, or are new to this type of program.

More sector-specific guidance (e.g., on estimating small sources), technical assistance from contractors, and example IMPs would help to speed up the process.

3.) How long do you think it reasonably takes for a company to create a full inventory management plan in accordance with the Climate Leaders IMP checklist?

The appropriateness of the timeframe is Partner-specific – EPA should continue to maintain flexibility, especially under this voluntary program.

Timing could be shortened if companies leverage existing reporting systems as much as possible for the IMP. However, if changes have to be made it could take a long time especially for large companies. Once big firms put standard operating procedures in place there is enormous inertia, and they can take years to change them.

All agreed that the size and complexity of the business would be a big influence on the time needed to fully complete the IMP.

4.) Does the IMP checklist provide you with the information needed to develop and document an IMP?

Yes, the IMP is useful for those who have used it but it would help to have some examples. EPA will look into making sample IMPs available for Partners. Technical assistance on developing an IMP is also provided by EPA's contractors.

Most found that all the components listed were appropriate.

A suggestion was made to have the checklist peer reviewed by other experts including industry trade groups, GHG verifiers, and other corporate auditors.

5.) What information can we provide partners through the desk-top review and the on-site IMP review that would be useful? What would be the most useful format for these reports?

There was a question on what the desk-top and on-site review would entail. The desktop review would look at the rolled up corporate inventory numbers and confirm that the correct methods and emission factors were used in compiling the inventory. The onsite IMP review is to figure out if the IMP is being implemented completely, accurately, and efficiently as designed at the facility level.

Partners thought that the most useful component of the desktop and onsite review is a check on whether the IMP and inventory numbers that Partners established meet the requirements of the Climate Leaders program. Partners would also like the desk-top review to provide them with suggestions for inventory management process efficiencies that can be gained. In addition, partners wanted help on unique situations that they may find themselves in (unique sources, assumptions, emission factors, estimation methods for small sources, etc.).

Participants would like EPA to provide an endorsement of the IMPs themselves (not of the inventory necessarily).

Report from EPA contractors should include findings, recommendations, and more importantly, an agreement for corrective action (avoid multiple iterations).

The sign-off process was found to be a critical component. Don't want to have to go through multiple iterations of the IMP, but realize it is a new process – but need some sort of "sign-off" to keep moving forward in the program.

Given that everyone is operating with different EPA contractors, need to ensure consistency among all the contractors.

Many companies joined Climate Leaders to ensure internal goals are met, but also to make sure that 3rd parties recognize that although there is flexibility, that the program is still robust enough to be credible.

6.) Can you think of any additional technical assistance that EPA could provide that would be useful in development of a high-quality GHG inventory?

A good sense of what EPA needs right at the outset – and what am the company is going to get out of it (something in between the Design Principles and the Climate Leaders

brochure), for both the CEO/higher level mgmt, as well as down through the workforce. Many people need to "sell" it internally before joining the program.

Partners want more communication from EPA on technical resources available to them, including technical information provided on the web. List of resources available for emissions tracking and inventories.

Other requests from participants included:

- Dissemination of best practices for each component of the IMP
- Current as well as historic emission factors and E-GRID data
- More guidance on estimation methods for small sources
- Examples of IMPs, especially within the same sectors
- calculation methodologies for reductions from offset projects
- 3rd party verification guidance

Additional topics discussed:

The relationship between Climate Leaders and 1605(b). There is a strong desire for consistency, despite the fact that everyone recognizes that there are two different goals. EPA is working with DOE on the development of the revised 1605(b). At this point it is not clear what 1605(b) reporting will look like when it is final.

Base years and reporting. There was a question on base year setting. There is no one set base year for the program. Each partner chooses their own base year for goal tracking. The base year selected should be the most recent year for which the Partner has data. Previous years' data can be reported under the program if the data meets the inventory requirements of the program. Previous performance is accounted for when analyzing a Partner's goal.

Some participants preferred EPA to require the reporting of facility level data unless a company has a specific reason not to, while others preferred that EPA keep it optional. There was no consensus among the groups on this.

Comment on the summary form – add some rows for documenting total emissions and space for tracking progress towards targets.

Rachel Madan, EPA: Plenary Discussion on Plans for Climate Leaders in 2004

Are you happy with the progress of the program, and do you have any suggestions for the direction of the program in 2004?

Q: why isnt' Labs21 involved in the program?

Cynthia Cummis, EPA indicated that Climate Leaders is focusing on working with large industrial companies and energy producers. We will explore the idea of working with Labs21

Comment: Happy with the program, but is concerned with compatibility with 1605b. Concerned that DOE is going to complicate this program that is moving along very successfully (i.e. don't let the 1605b evolution degrade this program).

Comment: As companies progress through the program, it would be nice to see the program evolve with them, and tailor the workshop such that it still enriches companies' programs. Perhaps have the 1st day focused on the newer members, or those that want to join, and the 2nd day can be focused on those companies that have been with the program for a while. For example, on the 1st day, give specifics and very specific workshops. **Ne**ed to show the "best of the best" in terms of both an inventory, and in terms of the IMP, even if the companies remain nameless.

Comment: indicated that when the conference grows larger, could have various topics running concurrently, so that companies can choose which ones to go to.

Comment: Very impressed with the progress. EPA addresses Partner comments at each workshop. Have moved forward in a realistic pace.

Cynthia Cummis, EPA: EPA is thinking of how to re-structure the partner meetings, now that the design phase is complete. EPA would love suggestions for breakout groups, and also EPA is thinking of opening one day to a much larger audience, and the second day would just be for partners.

Comment: indicated that on the first day, have specific breakouts (4-5) on very specific project examples, and keep the 2nd day focused on higher-level strategic information.

Are two meetings a year appropriate?

Comment: At least for the next year or so, it is important to have at least two meetings – especially as companies are moving forward with the newly rolled out reporting requirements.

Comment: Need to spread the meeting to some location where there is a best practices facility, so that meeting participants can meet the folks at the facility and learn from them.

EPA indicated that in the past, we have kept the meetings in DC to ensure that the Administrator can come. Perhaps we will have one meeting in D.C., with the Administrator, and another in a partner location each year. EPA also asked that if this is the case, what audience would be appropriate. Feedback was such that likely only half of the members (60-70 folks) would attend, anyway, and this would be a real "feather in the cap" for the environmental managers. Limit it to just partners and a few prospective partners.

Marketing and recognition: Do you find the new newsletter and case studies useful?

Comment: How often do you plan to issue them? Suggest keeping a running library of case studies online rather than printing them out.

Cynthia Cummis, EPA: Twice a year for the newsletter. As far as the case studies, more are coming up (energy efficiency in buildings, etc). Partners can always submit

ideas for case studies. Number of cas studies is tied somewhat to our budget . We are planning for a half dozen case studies for the upcoming year.

What do you think of the PSA? Does it convey the right message to the public as far as what you are doing?

Comment: A podium may signify "corporate" America, whereas most folks in the room aren't really well represented behind a podium – they are more innovative than that! Don't have a solution in hand – but suggests a more powerful icon to convey the Partners' power.

Comment: agreed that it is a bit "empty" – doesn't grab and get your attention

Comment: pointed out that the phrase in the middle, "Are you ready to step up to the challenge" could be bigger and moved to the top.

Comment: initially thought the podium looked like a scale.

Comment: indicated they got corporate approval, so don't change it anymore!!!

Comment: suggests mountain climbers as an image.

Comment: first thought was that folks were stepping up to take leadership, therefore liked the icon, but really encouraged companies to take a hard look at it before it is published in April or May.

Cynthia Cummis, EPA will communicate the information back to the advertising agency and see what they can do – no promises, though – went through many, many iterations!

Are Partners happy with the amount of recognition being received through the program? Suggestions for different types of recognition?

Comment: Really likes the pictures with the Administrator - means a lot when they are taken back to the companies (helps to show the company commitment and how much it means to EPA).

Any ideas for increasing the program's exposure? Methods thus far has been "cold calling", and in other cases, companies come to EPA.

Comment: Partners should talk to 3 of their "friends", and convey the information to EPA (either horizontal or vertical drilling).

Comment: agreed – going through trade organizations would be a big plus.

Q: Any thoughts on linking to EnergyStar?

Cynthia Cummis, EPA indicated that the EnergyStar message focuses primarily on energy efficiency, whereas Climate Leaders is broader – the message is focused on climate change.

Are you happy with the service that you are getting from your contractor? Are there ways to make the assistance more useful to you?

Comment: the contractors have been extremely helpful getting started. Really need to make sure that the contractors are following the same methodologies and standards to ensure consistency. Will really guarantee the long-term success of the program, especially as the program grows.

Communications – do you feel that EPA is keeping you adequately informed, both on Climate Leaders and Climate Change initiatives? Would you like us to provide you with more information on other EPA voluntary programs, if so which ones? Peer exchange topics?

Comment: Strategies for getting reductions would be a good breakout session (i.e. on EnergyStar, other voluntary programs, landfill gas, etc).

Another suggested discussing brief case studies. Better to discuss in person vs. via e-mail or printed. Clarified that we would need plenty of time for Q&A, and prepare enough such that questions are asked. **Cynthia Cummis, EPA** agreed on the Q&A. Cynthia also indicated that they really need help from the Partners to identify the great and innovative things that they are doing to include as case studies.

Comment: Agrees that Energy Star is a very distinct program, but it is good to maintain an open dialogue, as many companies are involved in more than one voluntary program. Energy Star is a vehicle for achieving Climate Leaders goals. Another example is Labs21.

Comment: encourages EPA to maintain what is e-mailed to Partners on the websites.

Rachel Madan, EPA also reiterated that Partners can always call EPA if they need support, anytime.

Are there any other highlights to address that we haven't addressed as far as topics:

Comment: Recent scientific studies on global warming.

Comment: Clean coal technology and CHP.

Comment: Waste Wise and Waste Management Projects