



The G20 at the Leader's Level



Energy Security and the L20

**Report L20 on Energy & Security Meeting
Stanford University, 13-14 October 2005**

Context and purpose of meeting

The premise is that the world needs a more flexible and informal vehicle of effective international governance. The organizing questions for the meeting, presuming that there was to be a forum of Leaders, larger than the G8, were:

- What could they aspire to do? Which shared problems have staying power to interest leaders?
- Where do leaders have unique competence, leverage and desire to act?
- What could be the value-added outcome of such a meeting?
- What initiatives could the L20 pursue (bearing in mind that forums such as this are not institutions for elaborate action but, rather, for leaders to make prominent commitments for their own countries, instruct their ministers to pursue initiatives, and agree to work together in international organizations to attain particular results)?
- What are the opportunities for collaboration and elements of a package deal?

The benefit of a Leaders' process is peer review and scrutiny; the opportunity for informal face-to-face interactions builds trust. The multilateral context provides an ability to mobilize pressure. A smaller forum allows for discussion of sensitive issues with less political posturing. At the same time, high-level scrutiny encourages good staff work and can generate package deals that would be difficult to craft in other fora. That same scrutiny can encourage leaders to adopt policies that provide collective benefits but would have been difficult if the only lines of accountability were domestic politics. (A historical example is that President Carter would never have decontrolled energy prices without the Bonn Summit.) Indeed, in a few key areas such as trade, leaders have been able to achieve incremental progress through such forums by focusing on areas of joint gains while avoiding other "no go" topics.

The meeting at Stanford examined the prospects for the L20, if it existed, to address the issues surrounding energy security. The group found that "energy security" is an elastic concept. However, it offers the prospect of linking "hard security" issues, such as territorial protection and supply of vital fuels, in mutually reinforcing ways, with "soft security" issues, such as protection of the environment generally and specifically the limitation of the emissions that lead to global climate change. Such linkages, which could engage a large number of countries and diverse interests, make energy security a good prospect for early action by the L20. Moreover, security of energy supply is once again high on the agenda of most governments because of the current high prices for energy,

notably oil. Political action is needed not only because consumers demand it, but also because a large and growing fraction of the world oil supply is under direct control of governments who make supply decisions on the basis of political factors.

Energy issues are a longstanding part of the G8 agenda, where politicians have given attention to energy supply and efficiency. Much less attention has been focused on the effect of lifestyles—such as suburban sprawl—on energy consumption, which remain an area where it is unlikely to achieve meaningful consensus. The Gleneagles summit listed “Transforming the way we use energy”, “Powering a cleaner future”, “Promoting research and development”, “Financing the transition to cleaner energy”, and “Improvements to energy efficiency” as the headings for G8 initiatives. The Evian G8 Summit focused on energy efficiency. The Sea Island Summit led to the 3Rs Initiative (Reduce, Reuse, Recycle) which was launched in Tokyo this April to encourage more efficient use of resources and materials. Gleneagles recognized “the importance of raising consumer awareness of the environmental impact of their behaviour and choices”.

Elements of a package

Our meeting focused on possible elements of a six-part package deal, mindful of Eisenhower’s maxim that one way to solve a big problem is to make it bigger. We also examined reasons to be skeptical of effective action on these topics. The discussion was based on observations of several background papers that are available online at www.L20.org. The main points of the package and the reasons for skepticism are summarized below.

The possible elements of a package deal reflect our discussions over just a day, and we were mindful that additional elements probably will be needed—notably on renewable energy sources, which provide opportunities for easy agreement and occupy a prominent place in the G8 Gleneagles declaration and are an important issue for many key countries. A full package of measures will also require policies related to coal, which provides most of the world’s electricity and is a key prime mover for most of the world’s largest countries. Already there are many nascent technology cooperation programs on coal that could be a starting point for a fuller collective effort and an important element of a package deal on energy.

Throughout our deliberations we remained mindful that heads-of-government processes (as in the G8) are not operational institutions. They do not, themselves, do much; rarely do they even have dedicated secretariats. Rather, they provide a forum for discussion and for making decisions that instruct others—multilateral institutions and governments, notably—to act.

1. Educational

- L20 action on energy security could help to convey the message that security comes through well-functioning markets with redundancy, flexibility and reduced volatility—not through mercantilism. That message, in turn, could help key

- countries that have been attempting mercantilist approaches, such as China and to a lesser degree India, move in the direction of more market-friendly policies.
- L20 might also help to articulate issues associated with clusters of technologies (e.g. risks of nuclear power) that could ease the process of public acceptance and thus make it easier for governments and private firms to invest in this technology.
 - L20 could improve the informational base for energy policy, including forecasts for supply and demand. Such efforts could include a high level international commission to report on energy issues writ large, based on study and hearings—in the style of the IPCC, the Bruntland Commission or the Millennium Ecosystem Assessment. They could also include efforts to establish stricter data protocols and perhaps more open modeling and model comparisons so that public policy is based on better data and a wider range of modeling efforts.
 - L20 could also help to articulate and advance effective strategies to address particularly pressing energy problems—such as to bring clean, modern energy (e.g. electricity) to one and a half billion people currently without.

2. Oil Supply, Demand and Rules of the Road

- The L20 could focus attention on the need to enhance crude oil stockpiles and full membership (China and India) in IEA stockpiling scheme. It could also instruct governments to coordinate spare capacity and “soft” equipment (gas/oil separators, key infrastructure, etc.) against accidents and terrorist attacks that could roil world energy markets.
- In addition to crude oil supply and stockpiles, L20 could provide a forum for governments to enhance product stockpiles and to make internal policy decisions (e.g., liberalization of prices) that would improve the flexibility of product markets.
- Improve transparency and governance in supply regions – eg Chad—Cameroon plus; offshore funds; “publish what you pay”.
- With respect to demand, the L20’s efforts could range from relatively easy tasks (e.g., encouraging fuller use of market pricing for products) to those where collective action will be more difficult (e.g., coordination of efficiency programs or even the orchestration of aggressive conservation and efficiency programs).
- L20 will need to debate whether, and how, to coordinate a strategy for promoting investment in new supplies. If the goal is to promote investment in supplies from the lowest cost regions (i.e., mainly OPEC) then key OPEC countries will need to be part of the dialogue in the L20. If the goal is to promote investment in supplies from countries outside OPEC, then it may be important that OPEC nations *not* participate in the L20 process as they may derail efforts to set price floors or other mechanisms that could insulate extra-OPEC investments from the periodic OPEC-delivered crashes in oil prices which discourage private investment in these fields.

3. Gas

- The L20 could provide a forum for discussing the importance of particular key pipeline projects that make feasible a fuller use of natural gas in national energy systems. Some projects (e.g., Iran to Pakistan and India; Russia to China) may

not be realized without high level political cover. Similarly, the L20 could articulate or endorse grand pipeline plans, such as the ASEAN gas grid.

- The L20 process could allow for better coordination on key standards (e.g., port security for LNG tankers) essential to tap the full potential for international trade in gas. Gas, like oil, is concentrated in locations far from the largest ultimate markets, and a worldwide shift to gas—which could make it easier to control emissions of CO₂, since gas used to generate electricity emits less than half the CO₂ of coal—will require massive international trade in gas.
- L20 could provide a forum for discussing and articulating visions of how international trade in gas contributes to energy security (rather than dangerous dependence on imports) due to the wider array of energy options provided by multiple pipelines and LNG suppliers. Whereas oil has no rivals and dependence on a world market has correctly raised security concerns, in most applications gas must compete with a wide array of rivals.

4. Nuclear

- Efforts within the L20 would need to be focused on topics where the L20 is likely to have a special advantage. On safety and waste issues the L20 would have little role except to bless efforts under way in other forums; on proliferation, which is a much harder task to address, the L20 could be the best place for a frank discussion regarding internationalization of the nuclear fuel cycle.
- L20 might play other roles, such as encouraging countries to adopt policies and regulatory frameworks that would reduce risks associated with new plants.

5. Climate Change

- The L20 could focus attention on the continued need to coordinate funding for climate science, especially data collection and dissemination and the comparison of model results. In addition, the L20 could provide a forum in which governments decide on the need to fund and operate additional key research activities, such as perhaps 2-3 new general circulation models (GCMs) that are used to model world climate.
- Perhaps most importantly, L20 could provide a forum to discuss elements of a package deal that would extend the Kyoto commitments. The Kyoto process itself has not been attractive to all key countries (notably the U.S., but developing countries are also generally wary), and an alternative forum could play an important complementary role.
- The L20 could establish a process for coordinating key technical standards, such as trading and monitoring of CO₂ credits or the rules to govern liability and credit for CO₂ sequestration, which would make it easier for an integrated CO₂ market to emerge with time and experience.
- The L20 could also provide a forum in which governments are urged to pursue low-carbon development strategies (renewable energy; gas infrastructures; nuclear; coal with CCS). The L20 could be a place where leaders discuss (and explore ways to remove) bottlenecks in those strategies. For example, focused technology diffusion and transfer mechanisms could be an important part of decisions by key developing countries to pursue such strategies.

6. R&D

- L20 could provide a forum to discuss and then act on the apparently growing problem of under-investment in energy research. It could, in particular, promote spending on large scale, high-risk, game-changing research and development on new possible sources of energy. Many of the main energy problems—such as the environmental consequences of coal, global warming, the cost of transporting gas, the extreme difficulty of storing electricity—are possibly amenable to such research. Particular topics may also include collaborative research on issues of special importance given rising governmental concern about energy security, such as conversion of coal to liquid fuels in ways that do not cause prodigious CO₂ emissions and also renewable energy sources.
- L20 could also coordinate national programs where particular nations focus on areas of competence (e.g., wind in Denmark and Germany; coal in the U.S. China, India and South Africa; nuclear in Japan, U.S., France and South Africa). Similarly, it could encourage fuller coordination and investment in existing programs, such as those for Generation IV nuclear reactors.
- The L20 process may also help to identify priority research areas that existing government and multilateral programs are unlikely to pursue adequately on their own for lack of funding or political cover. Those include R&D by IAEA and others into technologies that could substantially reduce the risks of proliferation.

Reasons for Skepticism

Our enumeration of possible elements of L20 action on energy security is long and complex. The exact contours of a package deal will depend on the vagaries of the moment, as well as the personalities and governments that initiate and sustain the process. Throughout our deliberations we were also mindful that there are many reasons to be skeptical of the L20 process. Among them:

- L20 should not be convened to solve problems that may solve themselves. For example, efforts to counteract the workings of OPEC must realize that OPEC's effectiveness as a cartel is prone to over-statement, and arguably the price run up in recent years is largely unrelated to OPEC's work.
- Governments find it very difficult to look and invest beyond 2 to 3 years, but investments in most energy projects have amortization periods of 10-25 years.
- It may be particularly difficult for governments to engage in meaningful coordinated action on oil supply because the decisions at their disposal lead to multiple possible strategies, and depending on the strategy the composition of the L20 may need to be varied. A strategy to boost investment in spare capacity requires Saudi Arabia's participation; a strategy to boost investment in alternative supplies would be hampered by Saudi Arabia and other core low-cost oil suppliers.
- It is difficult for governments to promote and coordinate large R&D projects without them becoming patronage-ridden (e.g, Synfuels). Such problems may

particularly hamper efforts to pursue such programs in a coordinated global fashion.

- Ambitious international R&D programs involve intellectual property issues, which, historically, have proven difficult to resolve. The L20 could initiate such programs only to find them stalled by such obstacles.
- The L20's role in nuclear power is unclear. The area of greatest potential leverage is proliferation. However, perhaps proliferation is already beyond control, given events in Iran and Korea and likely responses by their neighbors. Moreover, internationalization of the fuel cycle (a topic that has already been floated by others and met much resistance) may be too hard for the L20. Perhaps a smaller group, if any at all, could make progress.
- A long list of possible issues—as done earlier in this report—does not provide a clear picture of priorities, or clarity on the continuing role the L20 might play. There are too many areas where the L20 needs substantive analysis to decide, and where the pros and cons are not fully listed or apparent.