## **Curriculum vitae of Jan Bakkes**

Jan Bakkes specialises in assessing and processing environmental information for decision-making. For example, he led the Getting into the Right Lane for 2050, a high-profile back casting study into the key challenges facing the European Commission 2010-2014. For a period of 25 years, alternating with assignments abroad, he was senior project leader at the PBL Netherlands Environmental Assessment Agency. He has worked with the OECD (Paris) and the World Bank (Washington DC) and was associated with UNEP (Nairobi) for a long period of time. These organisations he helped to kick-start broad-based assessments and outlooks for the future, such as the OECD Environmental Outlook. He fulfilled key roles in a range of science-policy interface projects for the European Commission and other EU organizations, such as Cost of Policy Inaction; and Beyond GDP; and EU Resource Efficiency in a Global Context.

Since 2010, Jan Bakkes has been assisting the China Council for International Collaboration on Environment and Development (CCICED) as member of a number of high-level Task Forces and Policy Studies. Since his retirement from the PBL Netherlands Environmental Assessment Agency, end of 2014, Jan is senior strategic advisor to the Director-general of PBL. Among other roles, Jan is vice-president of The Integrated Assessment Society (TIAS).

Working with teams addressing complex challenges has been a defining feature of most projects in Jan's career. Here are some examples.

During the 1980s, Jan coordinated the world's largest group on environment statistics, at Statistics Netherlands. As an organizational unit, the group has been split up. Jan's role was to work with the four resulting teams, one led by himself; with the group's founder; and with Directors as well as interest groups in order to produce coherent and strong output, and maintain further development and growth. The result was a coherent group that was using the strengths of the wider organization.

Around the time of the 'Wende' in Central and Easter Europe, Jan took a role in three international peer reviews of environmental developments and policy in specific countries: Belarus, Latvia and Russia. In Latvia, he covered the sensitive issue that environmental management in industry was, in practice, a matter for the ethnic Russian segment of the population, being the cadre in industry; for the Russian Federation, Jan was rapporteur. Each of these projects involved an ad hoc team, and respondents under pressure. The Latvia review must have been very helpful in reaching 'acquis' to the EU. The reviews for Belarus and Russia were quickly made obsolete by political shifts.

In 1990, Jan led a small team conducting a forensic analysis into the groundbreaking environmental outlook Concern for Tomorrow. The three-person team combined different skills and toolkits; the proper way of reporting had to be invented while working. More than a bit controversial, the team found that the findings of the outlook were plausible but it would be impossible to account exactly how these findings had been reached. This triggered three decades of work to improve and express the quality and pertinence of environmental outlooks.

In 1994, Jan led the World Bank mission to advise on the sustainability of the water cycle in Saudi Arabia, based on the example of Jeddah. He supervised a team that otherwise consisted of US-based commercial consultants. The mission found very large inefficiencies, wastage and in particular quantified the damage to population health population caused by the town's desalinization plant – a painful message. At the same time, the consultants had to be corrected for substantive errors, grossly overstating the damage. This was a rare case were public, hierarchy-based intervention was necessary (and saved the mission's eventual impact).

Jan had a large, active role in the initiative to develop the Global Environment Outlook (GEO). From the early 1990s to the mid-2000s, Jan worked with, or led, a large number of fast-changing teams. This concerned pilot outlooks, making connections between competing methodologies, finding constructive resolution for the power struggles between global and regional groups, etcetera. Eventually, by the mid 2000s, GEO was big and influential. In this undertaking, Jan collaborated with many colleagues of the global network came with it.

From 2004 to 2008, Jan co-managed the OECD Environmental Outlook to 2030. This was the OCED's first truly large outlook and was compiled in collaboration between OECD and PBL. Of each organisation, 30 people were involved. In terms of team collaboration, Jan successfully addressed issues such as: (i) two independent world class modelling teams learning to work together; (ii) providing national delegates periodically with sufficiently interesting and open propositions as a basis for discussion among themselves; (iii) motivating team members, as well as their home organizations, to remain with the outlook project as it developed and grew. The project resulted in productive and lasting cooperation between PBL and OECD, providing more collaborative studies with relative ease after this first outlook.

Jan led or co-led quite a few EU-sponsored projects. Most were relatively small, fast and targeted. The basis of success for these was a network of team leaders of centres spread over the EU, who had worked together before, knew each other and could therefore very quickly respond to calls and compose a project team. For example, Jan led a scoping study to explore the potential of the notion of *Cost of Policy Inaction* after this term had been used in a policy panel. The study quickly mobilized European centres on environment and economy. With full consensus and working quickly, it advised the European Commission to interpret the notion in terms of big-ticket items, i.e. to steer away from detailed cost estimates. This proved useful for the European Commission in its interagency policy discussions. The notion was quickly taken up in subsequent larger studies, for example on the cost of policy inaction on biodiversity.

Co-leader and one of the main initiators of the FLIS network: Forward-Looking Information and Services. Sponsored by the European Environment Agency, FLIS is a network of working-level government experts from European countries, including Russia and the Balkans, engaged in forward-looking studies on the environment. Its main purpose is to establish a community of practice, in order to exchange experience and assure that these people that they are not alone. Notwithstanding marked differences in favourite approach, the spirit and energy of this network were was great. Jan handed over, two years after setting up FLIS, in order to focus on China.

Collaboration in the mixed Chinese/international groups of the CCICED is always difficult, though often very enthusiastic. Since 2010, Jan had a role in five of these groups, including two high level task forces. Challenges are, naturally, conceptual differences and different framing of issues. These are exacerbated by outside pressures to deliver existing pieces of work; extreme time pressure; as well as differences in reporting style and standards of quality. Jan has been effective in most of these groups by explicitly recognizing these challenges. Even without directly working on the challenges, this has in most cases led to a good reports that have been used. For example, on reorienting China's environmental policy in the light of the emerging priorities of social development. On occasion, Jan initiated continued official collaboration outside the original setting.