

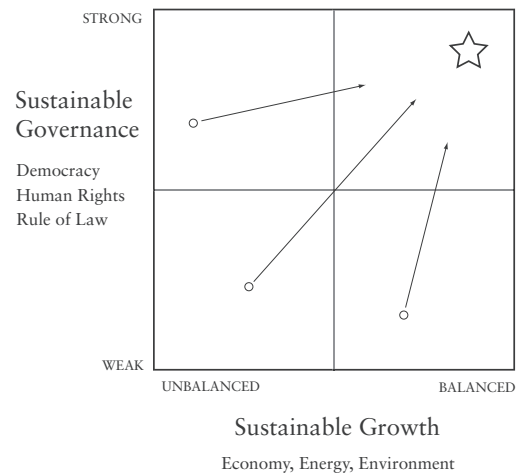
# An introduction to the Design Workshops

*As an anchor to the conversations at the Tällberg Forum this year, ten places around the world will serve as prisms through which to explore the issues facing the world today, globally and locally.*

The locations are Lima (Peru), East London (UK), the High North (Norway, Russia and Greenland), Dalarna (Sweden), Sofia (Bulgaria), Kasese (Uganda), Bundelkand (India), Dhaka (Bangladesh), Lake Tonle Sap (Cambodia), and Guangdong (China).

The ten locations will provide tangible entry points to the dual systems challenge which forms the theme for Tällberg Forum 2006: How to balance the need for economic growth with limited energy resources and the fragilities of the global environment; and to do this while also strengthening fair and transparent governance, human rights and the rule of law. Climate change and the unfolding energy crisis will cause friction and redistribution of power, and hence put much increased pressure on our governance frameworks. New governance frameworks, in turn, are probably needed to develop solutions going forward.

Local problems will be presented by teams coming from each area in ten parallel workshops. In a moderated discussion the group will explore how local issues relate to regional, national and global challenges, before the conversation will turn to practical initiatives and actions that will help each locations move towards a more sustainable future.



The Design Workshops will take place three times during the Forum. Participants may wish to select one of the locations to follow throughout, although as with the entire Forum, ultimately, the program choice is left to each individual.

On Saturday afternoon, a plenary reporting-back session will make it possible for each Design Workshop to share their main findings with all Forum participants.

The learnings that emerged from the Design Workshops will be compiled and further developed to create a book that will be made available to participants, and will be presented in a workshop early 2007 at the UN Headquarters in New York.

### The three sessions of the Design Workshops:

#### 1) Thursday, 29 June 2006, 9.00 – 11.45

Each location is introduced and its challenges are presented and analysed.

#### 2) Friday, 30 June 2006, 9.00 – 11.00

Themes that emerge from each place are pursued in greater depth, with selected inputs from external perspectives.

#### 3) Saturday, 1 July 2006, 9.00 – 11.30

Actions and strategies supporting sustainable progress are defined for the specific locations.



- 1 Lima (Peru)
- 2 East London (UK)
- 3 High North (Norway, Russia, Greenland)
- 4 Dalarna (Sweden)
- 5 Sofia (Bulgaria)

- 6 Kasese (Uganda)
- 7 Bundelkhand (India)
- 8 Dhaka (Bangladesh)
- 9 Lake Tonle Sap (Cambodia)
- 10 Guangdong (China)

# Design Workshop

## Lima – Peru

*Street children in Peru are a microcosm of the systemic challenge of Latin America today. They are the symbol of a broken social system – the rejects that do not fit.*

In some cases, their parents fell into desperate straits and could not care for them financially, or fell victim to pandemic diseases like HIV/AIDS. Yet again, other flee horrific abuse at the hands of those who were meant to raise them with care. Whatever the cause, street children end up destitute and eke out an existence in urban centers, hoping to glean crumbs off the table of the wealthy society. To make matters worse, street children live in areas that have the most degraded environmental conditions. Their marginalized status keeps them in those places without the possibility of change and development.

Local non-governmental organizations (NGOs) in Peru have come to understand that the productive work that street children do plays a formative role in their own lives and in the community at large. Many street children are beginning to create their own dignified jobs. The work helps young



children and teenagers recognize that they can actively participate in the creation of their own destiny.

While child labour is outlawed, through their work, street children not only survive, but if recognized and valued by international organizations and central governments, they can prosper economically and realize health benefits, education, freedom, and identity.

The shift of language and concept - from child labor to entrepreneur children - can serve as a frame to develop new policy about projects of development, democracy, and children's rights. Formalizing the status of children as entrepreneurs will bring attention to the areas where they live and provide resources that have the potential to transform their environment.



### Wider Context

The plight of the children on the streets of Lima is indicative of the root of the direction politics have taken in South America. Extreme inequality increases appeal for populist or messianic leaders who promise a new world. Behind support for defeated populist candidate, Ollanta Humala, was a deep-seated resentment and fear of missing out on progress. Humala promised to deliver justice to the “people” by firm measures against the “exploiters”.

Some analysts consider that the raise of populism is the fault of governments rather than businesses or the neoliberal economical model. Export agriculture, manufacturing, tourism and construction are all growing impressively and generating jobs. But political parties rank with only 19% confidence level among Latin American institutions. Despite the rise of populism, credit conditions are improving in Latin America and many investors expect upgrades after the elections.

The economics of energy/oil in South America, and its implications for autonomous political systems, is in transition. The Venezuelan government of Hugo Chavez has used oil revenues to promote his selective brand of socialism, and promoted new investment in poor communities. The people of Bolivia and Peru are particularly receptive to the Chavez model. What that will mean for politics and economy in the Americas, and opportunities for the impoverished majority in South America, lies in balance.



Commentary by  
*Luis Enrique Bazan*  
Partner, Right Reality, USA

Children - the most vulnerable population - are embracing the entrepreneur spirit through their efforts to start and run their own businesses. Organized working children have created a well articulated system to pass along to other children their entrepreneurial experience and support new businesses initiatives.

Commercial activity for these children is not an end in itself but a means to other social development purposes. Along with their business activities, they extend their interest in participating in their own and society's development, and improving their quality of life and of the environment in which they live. The difficulty is that without an experience of working in big businesses they will have problems of transitioning from subsistence towards a business of accumulation.

The platform to pass along the business experience of working children could be extended - with the help of local organizations - towards street children. The most vulnerable children positively impact the environment, democracy and economy when they have the opportunity of owning their means of living. Our challenge is to help with education and microfinance as part of their business initiatives, allowing them to have a healthy working experience in big businesses and eventually moving to long term prosperity.

## Challenges

- New policies for development projects, democracy, and children's rights are needed to address the problem of street children within the legal and social system.
- The attention of wider society needs to be brought to the issue of street children and the areas where they live, to make resources available that have the potential to transform their environment.
- The effect that the political situation in South America is having on the ability for society to help the poorest members of society such as street children must be better understood.

## Facts

A small upper and middle class has benefited from impressive economic growth in recent years while half the population live on less than \$2 a day and feel that the state has little to do with them.

Democracy in Peru is purely procedural and electoral. It is weak in terms of institutions and citizenship. A recent UN study revealed that more than 70% of Peruvians support authoritarian governments.

Officially, poverty has only fallen from 54% in 2001 to 51% in 2004 in Peru;

75% of young people want to emigrate – from a population of about 28m, more than 400,000 Peruvians left the country last year, up from about 300,000 in 2004;

70% of the economically active population has created their own, informal, jobs. Many of these small businesses are only for subsistence instead of accumulation.



## Program details

Location: Hotel Åkerblads

Moderator:

*David Batstone* (Right Reality, USA)

09.00 – 11.45 Thursday 29 June

*Luis Enrique Bazan* (Right Reality, USA)

*Fernando Villaran* (Former Labor Minister, Peru)

*Frank Salas* (National Leader, MNNATSOP, Peru)

09.00 – 11.00 Friday 30 June

*Hector Castillo Berthier* (University of Mexico)

*Elena Martinez* (UNDP, USA)

09.00 – 11.03 Saturday 1 July

Designing future strategies

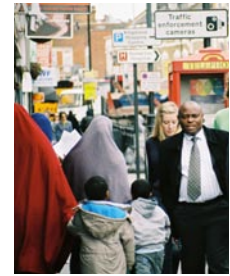
# Design Workshop

## East London – UK

*The three boroughs of inner north east London – Hackney, Newham and Tower Hamlets – starkly illustrate many of the biggest challenges of globalisation.*

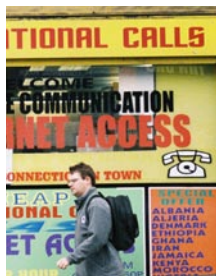
In these areas, which include some of the most diverse local communities in the world, high levels of both affluence and poverty coexist. Historically, this part of the City was the pioneer of an earlier wave of globalisation. Along with trade came waves of migrants from the Huguenots in the 16th century to east European Jews in the 19th century, Bangladeshis in the 1970s and 1980s, and a new wave of migrants from Somalia and Eastern Europe in the 2000s. London continues to absorb over 200,000 migrants each year - both legal and illegal. This trend throws issues of diversity, exclusion and governance into sharp relief. It is creating a new kind of city, with new challenges of governance, inclusion and conflict.

This continual arrival of migrants is putting great strain on public services, schools, housing and transport, although overall it has taken place without the problems experienced in France or in other areas of England. However, the far



right British National Party is growing in strength, doubling its number of local councillors in recent local government elections. Although the overall vote is still low, and far weaker than, for example France and Belgium, in one east London borough it won 11 of the 13 seats it contested.

North east London boroughs include areas with some of the UK's highest unemployment rates as well as areas of strong employment growth and demand. It is now the centre of many highly globalized industries – the financial services congregated in Canary Wharf, design and the arts in parts of Hackney – but also a large population with insecure, low paid jobs. Sections of east London lying along the river Thames must also prepare for the rising sea levels brought about by climate change, set to put the functioning of the Thames Barrier to the test.



### Wider Context

The complexities of London's position became apparent within the space of 24 hours in July 2005. East London won its bid to run the 2012 Olympics, in part by emphasising its extreme diversity and the optimism of its young people. The very next day terrorist bombs on the London underground, including one near Aldgate East next to the biggest concentration of Bangladeshis outside Bangladesh, showed a very different picture of diversity.

A growing role of the EU in determining important policies contrasts with recent moves to pass power to London's neighbourhoods, increasing local control over public spaces and policing. This move brings the challenges of governance in diverse communities to the fore. Through the special arrangements needed to avoid capture of power by one community or another, London exhibits a very local equivalent of problems faced by Lebanon, Northern Ireland or Belgium, where classic democratic arrangements can be problematic.

The boroughs of north east London are crucibles where many of the changes driven by globalisation are visible in a stark form. Communities and the public sector must develop skills to manage perceptions of entitlement and belonging as, if unaddressed, these have the potential to both perpetuate inequality and continue to drive resentments that fuel the far right. All dynamic global cities are struggling with the parallel issues of how to spread economic benefits to marginalised groups; how to avoid widening inequality and help people adapt to new labour market conditions.



Commentary by  
*Geoff Mulgan*  
Director of the Young  
Foundation

London's potential and possibilities are undeniable. Twenty years ago it looked like London was stagnating; yet instead it has been through an extraordinary renaissance. The City remains hugely dynamic in financial services and more than 600,000 people now work in the creative industries. But London is also grappling with severe challenges: a huge inflow of new migrants, both legal and illegal, that has left parts of London more diverse than any other city in the world; continuing high levels of unemployment, including areas where worklessness is amongst the highest in the UK; and the problems of growing Europe's biggest new urban development in the Thames Gateway east of London.

The Young Foundation has been based in Bethnal Green in east London for over fifty years, and is closely involved in many areas of London life – undertaking research, creating new institutions and enterprises and promoting new ideas. For all its frustrations we love London – as a city that's always full of energy and possibility and that's becoming a microcosm of how the world as a whole is coping with the challenges of diversity. London's eastern boroughs have become a crucible for globalisation, living out day to day the complex links between big global forces and very local realities.

## Challenges

- A long history of racial conflict in east London dates back to the 1930s, and today the far-right British National Party is seeking to exploit fears about Islam.
- London's ecological footprint is 293 times its size. Traditionally East London has been the most polluted part of the city – downwind of dirty industries. Today the Greater London Assembly is engaged in active efforts to cut overall CO2 emissions through transport policies, including the congestion charge for cars, encouraging cycling, walking and buses.

## Facts

There are 34 communities of foreign nationals in London with more than 10,000 members, 20 communities with more than 5,000 people.

In Tower Hamlets in 2002, 17 schools had more than 90 per cent Bangladeshi pupils; 9 schools fewer than 10 per cent.

53 per cent of inner London children live in poverty according to official definitions. 20,000 16-18 year olds are not in education, training or employment and some 30,000 of working age in east London are inactive classified as disabled.

Londoners' experiences of economic growth are varied. It has an 'hourglass economy' with 15% of the population clustered at the highest and the lowest ends of the income scale.



## Program details

Location: Hotel Åkerblads

Moderator:

*Eric Best* (Best Partners Inc, USA)

### 09.00 – 11.45 Thursday 29 June

*Geoff Mulgan* (Young Foundation, UK)

*Nicky Gavron* (Deputy Mayor of London, UK)

*Dal Babu* (Superintendent, Tower Hamlets Police, UK)

### 09.00 – 11.00 Friday 30 June

*Rien van Gendt* (Van Leer Group Foundation)

*Michel Rocard* (MEP, France)

### 09.00 – 11.30 Saturday 1 July

Designing future strategies

# Design Workshop

## The High North: Norway, Greenland, Russia

*The High North – the part of the Arctic that covers the Barents Sea and the northern parts of Norway, Greenland and western Russia – is still largely virgin territory with a unique ecosystem. Habitats and species can still be studied here closer to their original state than anywhere else in the world. The High North is home to the indigenous people of northern Europe that rely on nature for their subsistence and well being and have their traditional homelands in the wilderness. They hold a virtually untapped source of tradition-based knowledge of the Arctic nature. Beyond the wilderness of the land, the marine ecosystems in the Barents Sea are among the most productive in the world, providing an important commercial asset for Europe.*

The consequences of climate change in the region are dramatic. Temperature has increased faster here than in other parts of the world. The ice of the Arctic is melting at a high rate. Open sea has already been observed around the North Pole in the summertime. The extent of the summer ice sheet was at its minimum in recorded history in 2005, and cur-



rent estimates indicate that the entire summer ice sheet may disappear in this century.

When the ice melts commercial interests in the area will vastly increase – fishing, exploration of natural resources, trade and military transport routes. The US Geological Survey has estimated that about a quarter of the world's undiscovered petroleum reserves are located in the Arctic, and a large part of this in the High North. Massive investments are expected to flow into energy exploration in the region over the next few decades. Rising oil prices and the approach of the oil peak will make development of the region's great energy resources increasingly interesting to all nations with territorial rights, and place pressure on priorities here.



### Wider Context

The global ramifications of the melting of the Arctic are just beginning to be understood. The Arctic is an early indicator of the effects of global warming, and at the same time even these early effects will increase access to the High North, intensifying battles for ownership of natural resources, risk of border conflicts, commercial competition and existing fishing disputes. This will in turn bring international political and strategic consequences. The region is thus faced with a transformation over time which brings consequences for the economies and security of the countries of the region,

for the natural environment and for the indigenous people living there.

The opening up of the Barents Sea for oil exploration and production highlights the need for regulation and legislation to mitigate potential effects, both for the local environment and with respect to climate change. Successful exploration in the region will depend on a careful assessment of environmental risks, and adherence to ultra-stringent standards for any operations in this vulnerable region.

A coherent strategy for the region is required to balance the environmental and human consequences with economic and strategic interests. This will involve identifying the right players among nations, corporations, as well as organisations, who will be responsible for the management of resources in such a way that the region can continue to secure food supplies, jobs and well being for future generations.



Commentary by  
*Kjetil Skogrand*  
Secretary of State, Ministry of  
Foreign Affairs, Norway

For decades the High North was a frozen region, literally and politically. This is where Norway and Russia meet, on land and in the Barents Sea. The strategic position of the area is gradually shifting from a military security perspective to a perspective marked by energy security, sustainable resource management and climate change.

We need to strengthen international focus on issues such as the consequences of climate change and sustainable resource management. We need to strengthen knowledge and develop new technology and new management tools to meet the challenges in this area. And we wish to develop the High North to the best of the people who live in this region.

The juxtaposition of challenges and opportunities in this area lies at the heart of Norway's policy for the High North. At the same time, we see a need to meet these challenges together with close international partners. We will put a lot of effort into strengthening our co-operation with Russia, especially in the fields of resource management, health, environment and safety standards and energy security. We will continue to focus on cooperation in regional organisations. We will engage European and North American Partners in dialogues on High North issues.

## Challenges

- A key challenge will be to address the development of both economic and geopolitical interests in the region while protecting the local environment and without further contributing to climate change.
- Platforms and processes for the development of a strategy for the region are needed to support the balancing of environmental concerns and economic interests.
- A future geopolitical and economic role of the region must be clarified.

## Facts

The Arctic is a vast area occupying the northern end of the Earth. Arctic lands are found in Alaska/USA, Canada, Greenland/Denmark, Iceland, Norway, Sweden, Finland and Russia. The High North includes the part of the Arctic that covers the Barents Sea and the northern parts of Norway, Greenland and western Russia.

Estimates of the undiscovered resources indicate that about one billion cubic metres of oil equivalents remain to be discovered in the region.

Winter temperatures in parts of the Arctic have risen by 3–4 degrees Celsius in the last 50 years, and the mean temperature in the region has risen considerably more than the global mean temperature in the same period.



## Program details

**Location:** Hotel Tällbergsgården

Moderator:

*Göran Carstedt* (The Natural Step International, Sweden)

**09.00 – 11.45 Thursday 29 June**

*Kjetil Skogrand* (Secretary of State, Norway)  
*Harald Norvik* (ECON Management, Norway)  
*Robert Corell* (The Washington Advisory Group, USA)  
*Oren Lyons* (Chief, Onondaga Nation)

**09.00 – 11.00 Friday 30 June**

*Jan Nygren* (Saab Group, Sweden)  
*Sverker Sörlin* (SISTER, Sweden)

**09.00 – 11.30 Saturday 1 July**

Designing future strategies

# Design Workshop

## Dalarna – Sweden

*Dalarna is a mainly rural region in the middle of Sweden, only a few hours away from Stockholm by car or train. Historically, it was an important economic centre, with mining and forest industries as its core. These thrive today as high tech industries. In the wake of globalisation, the economy of the region has seen substantial structural adjustments, with de-industrialisation and a significant rise in the foreign ownership of local businesses. The service sector, primarily focusing on tourism and recreation, is now prospering in parts of the region.*

In the transition towards a post-industrialised economy there are political, social and demographic challenges. The clash between environmental concerns and employment interests become apparent in local conflicts over pollution caused by fish farming in Lake Siljan, or in the project “Tre Toppar” where entrepreneurs plan to turn an undeveloped mountain into a skiing resort. The competing visions often reveal a deeply emotive dimension linked to local identities and opposition to central authority. Rarely is this as palpable as in the clashes over hunting rights.



There is an overall fall in population in the region, with an emerging predominance of older, retired people, especially outside of the urban centres. Parts of the region also see high numbers of school drop-outs, especially by young men, which bode ill for future economic prospects and social stability. A relatively high level of youth unemployment and sense of disengagement, together with ethnic tensions between immigrants and ethnic Swedes, has also caused occasional eruptions of violence and increased criminality in some of the region’s urban centres.

But, overall people in the region live well. This leaves room for experiments and an historically embedded vision for Dalarna to show the world a way through the increasing conflicts arising from efforts to balance the economy, environmental and human needs, and the inevitable trade-offs arising.



### Wider Context

When compared internationally, Dalarna is a haven of social security, stability and environmental health. A well functioning local democracy – down to a village level – stretches far back in history and has allowed for a consensual management of competing interests and common resources. This may hold out a promising practice for other regions.

Like elsewhere in Europe, creating employment opportunities and maintaining affordable social services in the light of demographic pressures and restricted public funding are

key challenges. The social and political stability manifested in the long historical dominance of corporate structures like Stora Kopparberg, the oldest joint stock company in the world (now StoraEnso), and stable political coalitions - may in the context of adaptation be both an asset and a straight-jacket. Immigration as a possible source of new entrepreneurial energy is less extensive than in other parts of Sweden. The wider population is restrained in its enthusiasm for a more open vision of Dalarna and Sweden, as witnessed by relative resentment towards the EU.

In the wider perspective, the global sustainability challenge constitutes an opportunity for Dalarna to take on a leadership role. The region builds on a set of democratic principles and practices - where stability, economic adaptation and protection of the environment, have been well managed. Going forward, these institutions must adapt to the demands of a global dynamic economy, and the energy of local entrepreneurs be channelled towards our common global challenges.



Commentary by  
*Ingrid Dahlberg*  
County Governor of Dalarna

Dalarna's position is better than most other regions in the world and Sweden is in the top in most international rankings of living standard, social conditions and environmental performance. We are not free from problems, though. Each investment, infrastructure project or the expansion of the tourism industry creates potential conflicts with environmental interests or regulations. At the same time, increasing energy costs are a threat to the standards of living in the rural areas of the region.

Dalarna must provide favorable living conditions and an environment promoting business and growth. Energy sources should be renewable and not contribute to climate change. We need to go ahead with the development of new technologies that will increase and improve recycling, energy efficiency and renewable energy. Environmental concerns must be further prioritized, in business as well as in the public sector.

Dalarna is only a small part of the global eco-system. We must therefore make our contribution to solving the global challenges. We have a great opportunity to take a lead in this work. But we also need a global initiative, supported by international institutions, that can help curb the ongoing global changes in climate and environment.

## Challenges

- Involving schools, public entities and private enterprises in the development of new approaches to employment and the provision of social services.
- Guiding a stable homogenous society into a globalised world of diversity and rapid change.
- Harnessing the opportunities for a region like Dalarna that stems from the global sustainability challenge. This puts new demands on economic, social and educational institutions, as well as on public and corporate strategies.

## Facts

The size of Dalarna is 30, 000 m2 (approximately the size of Belgium), of which almost 70% is forest. Only 2% is populated.

The population of Dalarna is 280, 000. The population has been decreasing over the last ten years.

The main fields of employment are manufacturing industry and the public sector. Tourism is growing.

The total energy consumption in Dalarna is 18 TWh, of which fossil fuels make up 41%, electricity (mostly hydropower) 44% and bioenergy 13%. The processing industry consumes almost 50% of the energy.



## Program details

Location: Bystugan  
Moderator:  
*Tom Bentley* (Demos, UK)

### 09.00 – 11.45 Thursday 29 June

*Ingrid Dahlberg* (Dalarna County Governor, Sweden)  
*Anders Bjernulf* (Siljan Tourism, Sweden)  
*Ann Beskow* (Mayor, Orsa, Dalarna, Sweden)

### 09.00 – 11.00 Friday 30 June

*William Drayton* (Ashoka, USA)  
*Graham Leicester* (International Futures Forum, UK)

### 09.00 – 11.30 Saturday 1 July

Designing future strategies

# Design Workshop

## Sofia – Bulgaria

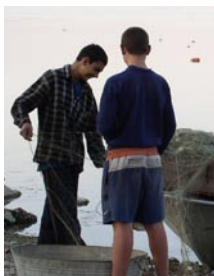
*Dimitar and Margarita Dobrev were preparing to take on the tougher competition their bakery network will face when Bulgaria joins the EU. They could see costs had to be cut to compete with Western Europe. Energy costs were soaring as oil prices rose. So they found a smart way to cut their energy bill. They radically overhauled their baking operations by switching from partially-automated bread production to a fully automatic line powered by natural gas. That cut a dramatic 59 percent of their energy use, and 85 percent from their energy costs – an annual saving of € 90,000. The fuel change also significantly reduces their contribution of greenhouse gases to the environment.*

One success story does not mean all is well, however. The country is home to the Maritza power complex, one of the most polluting power plants in Europe. The plant uses high-sulphur lignite coal, which produces acid rain, damaging to vegetation, buildings and water supplies. There are also four nuclear power units in Bulgaria of risky Soviet design – an energy source that Bulgaria largely has agreed to shut down. To complement dwindling domestic sources, Bulgaria relies on Russia for gas, a concern for price and security of supply.



With a faulty and inefficient energy infrastructure, it takes three times the energy to produce a unit of GDP in Bulgaria compared to Western Europe. Centrally controlled and metered district heating means householders are not used to receiving bills based on consumption, they control temperature by opening or closing windows.

While energy issues are being addressed, living standards have increased and unemployment has decreased. However, the country still faces serious social, demographic and economic challenges stemming from the communist era. For example, there are large regional variations levels of economic development, ethnic minorities lag behind, and the country has seen a fall in population by almost one-quarter since the early 90's, due to aging, a low birth rate and migration since the collapse of communism.



### Wider Context

The Dobrevs financed the overhaul of their bakery with a € 600,000 loan from PostBank. That capital was available because PostBank had received from the European Bank for Reconstruction and Development a credit line of €5 million designated to finance energy efficiency measures and renewable energy. The EBRD credit line, in turn, is complemented by a subsidy from an international fund donated to compensate Bulgaria for loss of energy supply as it decommissioned nuclear units.

Energy savings like those at the bakery may bring benefit to donor countries through carbon credits. Under the Kyoto Protocol, carbon credits can be traded by Bulgaria, which emits less greenhouse gases than permitted, to a country like the Netherlands that uses such credits to help reach the demanding targets set for EU-15 countries.

Bulgaria is one of the more successful examples of countries breaking away from the grip of planned economies to adopt a market economy, democratic political processes and sustainable approaches to growth. The Bulgarian economy is strong with good growth prospects in the medium-term. If it sticks to its plans for reforms, Bulgaria should achieve its goal of joining the European Union in 2007. To meet its EU objectives and be more attractive to foreign direct investment, however, Bulgaria must free enterprises from unreasonable restraint and help them become more competitive in the regional and global marketplace. These advances are vital in spreading prosperity across the country.



Commentary by  
*Erik Bergl f*  
Chief Economist, EBRD

It is difficult for large international institutions such as the EBRD to reach the grassroots and affect change that has real, measurable impact in everyday lives and enterprises. An example of where the EBRD has been effective is in the joint efforts with the EU to help Bulgaria address complex energy challenges that are a legacy of central planning.

Knowledge of the priority for energy saving and renewables is now spreading throughout Bulgarian society, and the government is eager to sensitise people to the economic and environmental benefits as well as the energy security aspects of saving on imported energy supplies.

However, the EBRD projects sometimes highlight deficiencies in environmental standards, and also bring out the wider political and social challenges of guiding a nation through a difficult transition. The trade-offs involved and the wider issues need to be addressed in dialogue between government, business and civil society.

Here, international organisations like the EBRD, and indeed the EU itself, can play a crucial role in providing the right incentives and frameworks to boost domestic institutional reforms and political renewal.

## Challenges

- While Bulgaria has made considerable headway in addressing its energy challenge, it has been less successful in addressing other issues undermining economic development and jeopardizing the country's plans to join the European Union in 2007. Among EU's key concerns are criminality and corruption.
- While EU accession offers considerable potential for local economic growth, many locally-owned medium-sized companies are ill-prepared for EU competition. They will face considerable investment needs with uncertain financing available.

## Facts

Population in 2003 was 7.8 million, down from 8.4 million in 1992.

Unemployment fell to 10 percent by June 2005, down from 13.6 in late 2003.

Population is highly urbanised: 70 percent live in towns or cities.

Bulgaria signed its EU accession treaty in 2005; it is unclear if it will achieve accession by 2007 as planned.

Bulgaria joined NATO in 2003.

In 2001 13 percent lived below the poverty line versus 36 percent in 1997.

Recent surveys show a decrease in corruption as an obstacle to doing business compared with previous surveys.



## Program details

Location: Green Hotel

Moderator:

*Petar Turkovic* (Foundation 2020, Croatia)

### 09.00 – 11.45 Thursday 29 June

*Dimitar Dobrev* (Eliaz-Dobrevi & Co, Bulgaria)

*Tasko Ermenkov* (Energy Efficiency Agency, Bulgaria)

*Richard Ferrer* (EU Representative, Bulgaria)

### 09.00 – 11.00 Friday 30 June

*Erik Bergl f* (EBRD, UK)

*Marek Belka* (Former Prime Minister of Poland)

### 09.00 – 11.30 Saturday 1 July

Designing future strategies

# Design Workshop

## Kasese – Uganda

*With its natural assets, you would expect Kasese to be a booming rural economy. It remains however a poor rural district. One could describe the dynamics best by saying that there is continuous changing interplay between progress and problems.*

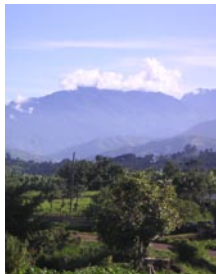
A rural district in the South-Eastern part of Uganda, Kasese borders the Democratic Republic of the Congo (DRC) in the east. It contains the Rwenzori mountain range, the foothills and the adjacent plains, and a fast growing population of approximately 550 000 people spread over three small urban centres and 650 villages. Most of the larger villages have electricity and the capital Kampala can be reached in 5 hours by car on a tar road. The district is endowed with fertile soils and an abundance of minerals. National parks, beautiful scenery, wildlife and the mountains provide attractions for tourists and two rainy seasons deliver two harvests. There are reliable sources of surface water available for irrigation.

Despite the apparent natural richness, 53% of the population is living below the poverty data line, 82% of the house-



holds have a cash income of less than \$25.00 per month and less than 25% of the economic active population has formal employment. This poverty arises from poor education, a lack of entrepreneurial skills and initiatives, greed and corruption of people in authority, ill health and economic blocks such as the inability to access capital and the high cost of micro finance. Other significant impediments to progress are the fallout from the war in the DRC between 1996 and 2000 and the historically marginalized position of the Bakonzo people.

Development is taking place at a slow pace, services are gradually improving and there are various interesting local initiatives taking place (micro-finance institutions, community projects). These trends, however, are not sustainable in the long run.



### Wider Context

Kasese District is neither an exception in Uganda, nor in Africa. Compared with many other communities on the continent it is even doing slightly better. Its difficulties can be only partly related to conflict or incompetent governments. Africa has shown stagnating or even declining agricultural productivity per person and per hectare, and while most Asian countries heavily subsidise use of modern methods such as hybrid seeds, fertilizers and irrigation techniques, strict regulations from financing institutions have prevented most African countries from doing so. The prevalence of

tropical diseases (almost all curable) and HIV/AIDS in Africa results in the death of 2-3 million children every year. And finally, Africa has remained relatively isolated and therefore unable to benefit from its few comparative advantages to gain a bigger share of commodity markets.

Africa as a whole is in a disempowered position to demand any changes to prevailing global economic systems. While Africa is unable to reap the benefits of the present global economic system it is, on the other hand, experiencing the emerging negatives consequences unequally strong. While Africa contributes minimally to the global climate change, it will feel the impact first and hardest, living on the edge of survival and having its survival mechanisms already stretched to the limit. Kasese's economy, which is based on a rain fed, low-input and traditional agricultural systems, will be seriously affected by even the slightest reduction in rainfall patterns.



Commentary by  
*Giles Kabika*  
 Chief Administrative Officer,  
 Kasese

From the top of the Rwenzori Mountains that form the border between Uganda and the DR Congo, one has a beautiful view over the foothills and the adjacent plains where the Bakonzo people live and practice agriculture as they have done for many centuries.

The problems facing the 550 000 inhabitants of Kasese District are, however, as high as these mountains. Due to a combination of adverse internal and external conditions and trends, like high population growth, poor basic services, unfavourable trade conditions and recurrent violent conflicts, development has stagnated in our district, resulting in 53% of the population living in poverty.

Accelerating soil depletion, the destruction of natural resources, and our dependence on external funding to maintain at least a basic level of services, make it clear that even this limited economic growth is not sustainable in the long term.

Nevertheless, leaders from various sectors in society in Kasese are motivated to try and change this situation and seek the collective intellectual capacity available at Tällberg to find new ways forward to break through the vicious circles of poverty.

## Challenges

- Land fragmentation, deforestation and land degradation damage agricultural productivity. These trends contribute to an irreversible decline in soil fertility. This situation is worsened by dependency on fossil fuels by both households and small industries, further contributing to deforestation.
- Dependency on external funding makes even the smallest improvement vulnerable and non-sustainable in the long term. Most community initiatives can only survive because of external funds and both national and local government budgets comprise more than 50% external aid.

## Facts

The doctor to population ration is 1:32,000 while the infant mortality rate is 88/1,000. 12% of the adult population is HIV positive

While enrolment in primary education has increased to almost 95%, the pupil teacher ration is 1:90 while the pupil classroom ration is 1:100.

Women spend on average 15 hours a day working, while men spend on average 3 hours productively.

At the present annual growth rate, the population is set to double every 20 years



## Program details

Location: Hotel Klockargården

Moderator:

*Peter Warshall* (Whole Earth Magazine, USA)

### 09.00 – 11.45 Thursday 29 June

*Giles Kabika* (Chief Administrative Officer, Kasese)

*Loice Bwambale* (Pan-African Parliament, Uganda)

*A.G. Mfite Basaza*

*Aidaloi Syauswa*

*Baluku Painato*

### 09.00 – 11.00 Friday 30 June

*Mo Ibrahim* (Celtel, Sudan)

*Mihir Bhatt* (Disaster Mitigation Institute, India)

### 09.00 – 11.30 Saturday 1 July

Designing future strategies

# Design Workshop

## Bundelkhand – India

*The Bundelkhand region is made up of six districts in the state of Madhya Pradesh and seven in Uttar Pradesh. These 13 districts have suffered a systematic destruction of their natural resources through feudal greed, over-exploitation and bureaucratic neglect. Consequently, Bundelkhand is now one of the two or three poorest regions in the nation.*

Comparable in size to a typical European country, this region in central India has an area of approximately 80,000 sq. km and a population of 15.5 million spread over 11,875 towns and villages.

Almost half of the population in Bundelkhand suffers from food insecurity, essentially due to two key factors: the continual depletion of land and the environment over the decades, combined with the lack of alternative livelihood opportunities. Scanty rainfall, coupled with rapid destruction of forest cover and loss of top soil have affected agricultural productivity and availability of forest produce. For an economy heavily dependent upon agriculture, this has led to general impoverishment of the population and consequent deterioration of their living conditions.



The reality of India is that two worlds co-exist in one geographical space: some 350 million consumers in a rapidly modernising India and the 750 million inhabitants of a Bharat (Bharat is the old Hindi name for India) where even the basic needs are not met. Even if the MDGs are realised, there will still be some 300 to 400 million people living at the margins of survival in Bharat. The pressure on the country's environment and the consequent pressure on the planet's life support systems will continue to grow until population growth (mainly among the poor) and resource consumption (mainly among the rich) are slowed.



### Wider Context

The perceived “success” of the Indian economy led the Government in 2001 to introduce policies under which it would no longer accept official development assistance from other nations, other than large donors (Japan, UK, EU, US, Germany and France).

Yet, the democratic system is sensitive to the ill-balanced distribution of growth, leading to mounting pressure to enhance the lot of the poor. In spite of this, few official development policies and plans translate into effective action.

Generally, we lack proven methods for large scale impact. Existing solutions often rely either on commercial methods or work by public and donor agencies, neither of which are sufficient.

Experiences with planning and implementation of development programmes differ between countries. There is, however, increasing evidence, especially over the last decade, that social enterprises are an effective form of institutional framework to deliver public goods and services in a business-like manner. For India and beyond, social enterprises thus offer an instrument for accelerating economic activity that leads to more equitable and environmentally sound outcomes.

However, social enterprises cannot afford to continue on a small scale. They need to scale up operations to attract and retain high quality staff essential to fulfilling their mandate. Engagement at an international level, with participation of institutions across the social spectrum is needed to achieve this wider application and scale for proven interventions.



Commentary by  
*George C Varughese*  
President, Development  
Alternatives

Any sustainable future for a Third World village must include strong institutional systems, a rejuvenated natural resource base, sustainable livelihood enterprises with support systems and upgraded village infrastructure and facilities.

Participative approaches to development based on practical scientific and management methods that empower communities and individuals to design their futures are the most likely to sustain themselves and be replicated on a large scale. Social enterprises, which apply community and business principles to development, are a powerful vehicle for achieving this. Thus far, social enterprises have emerged mostly from civil society and have had a limited scale of operation for lack of timely, critical investments.

Over the past twenty years, the Development Alternatives Group has evolved into one of India's premier social enterprises. A strategic alliance, extending over 5 to 10 years, between the partners of Tällberg and Development Alternatives would provide a very effective mechanism to innovate and deliver sustainable livelihoods on a large scale. The insights gained from this partnership will be useful to the partners of Tällberg in their other initiatives across the globe.

## Challenges

- Government, academic and businesses projects are often geared to the needs of the top two or three income deciles. Choice of inappropriate technological and managerial solutions has led to wasteful consumption patterns, inefficient production systems and the destruction of the environment.
- A small part of civil society seeks to address the problems of the great majority with meagre resources. Thus, poorly designed development interventions have led to outcomes that are not scalable, not widely replicable and unsustainable after the intervention is withdrawn.

## Facts

Nearly 400 million live on less than a dollar a day.

The number of hungry in India rose from 203 million in 1996 to 218 million in 2001.

Unemployment exceeds 200 million and grows by about 6 to 8 million each year.

Land designated as "wastelands" has doubled from 65 million hectares in 1950 to 132 million hectares today.

Forest cover has halved from 75 million hectares in 1950 to less than 30 million hectares today.

Water stress and water scarcity are now widespread conditions in virtually every State of India.

100 million people now lead lives comparable to their counterparts in Western Europe – while 400 million are amongst the poorest people in the world.

More than 2 million new rural emigrants arrive in the slums of Indian cities each year.



## Program details

Location: Hotel Klockargården

Moderator:

*Arun Maira* (BCG, India)

### 09.00 – 11.45 Thursday 29 June

*George Varughese* (Development Alternatives, India)

*Ashok Khosla* (Development Alternatives, India)

*Prochie Mukherji* (Mahindra & Mahindra, India)

### 09.00 – 11.00 Friday 30 June

*Julia Novy-Hildesley* (The Lemelson Foundation, USA)

*Yann Risz* (The Next Practice, USA)

*Tinoo Joshi* (Indian Administrative Service)

### 09.00 – 11.30 Saturday 1 July

Designing future strategies

# Design Workshop

## Dhaka – Bangladesh

*Dhaka is one of the fastest growing urban centers on earth. While the city is the hub for all national, regional or local economic activities, its urban administration is defined by centralized bureaucracy and suffers from favoritism, corruption and lack of transparency.*

The capital city of Bangladesh was founded 1500 years ago but its modern history began only 400 years ago when the city became a military outpost for the Mughals. Following 200 years of British colonial rule, it was left with a new “Islamic Identity” as East Pakistan.

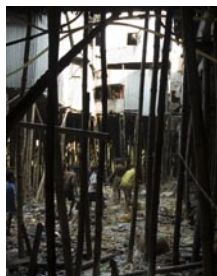
After the 1971 liberation war against Pakistani suppression, Dhaka, now the capital of independent Bangladesh, tackled tremendous pressure in reconstructing its war-torn infrastructure, re-organizing civil society, which lost many of its leaders in the war, and the institutions demolished by the Pakistan army.

Bangladesh has witnessed much progress in moving toward economic self-sufficiency, general access to education, population control, poverty alleviation programs, and infrastruc-



ture development. In these years, a strong civil society has emerged, with many national NGOs focusing on poverty elimination and development issues through microcredit programs, education, human rights and advocacy initiatives, family planning and legal aid.

However, although Dhaka today has a large well-educated and growing middle and upper class with more expendable income as witnessed in the increasing number of automobile showrooms and the rapid appearance of new western-style urban shopping malls, approximately 45% of the cities expanding population still lives below the poverty level lacking legal land tenure, access to basic services (water, sewage, energy), and suffering high rates of infectious disease. The pollution of surface water and encroachment of salt water from rising sea levels continue to endanger access to safe and drinkable water.



### Wider Context

Throughout its short history, there has not been a climate of good governance in Bangladesh, slowing many aspects of the nation's development. At the same time, a dysfunctional government has left space for the emergence of a strong civil society, and both national and international NGOs have played a critical role in providing social services and support for economic growth.

The textile industry is the nation's largest foreign exchange earner of over \$7 billion. However, little of such earnings

are spent in improving living standards in the city. Further uncertainty has arisen from the ending of the World Trade Organization's quotas in 2005, which threatens Bangladesh's place in supplying global markets and places pressure on the nation to aggressively seek diversification of production and trade.

With genuine infrastructural improvements, Dhaka could be a part of the regional economic growth. For instance, a state-of-the-art transport facility in Dhaka would lure India's eastern states to use facilities that would enjoy a logistical benefit over India's faraway cities. Similar arguments could be made that, as India and China become economic superpowers of the twenty first century, Bangladesh, again due to its strategic geographical advantage, could harness great benefits of such economic vitality. However, even if the country builds the above mentioned infrastructure to take a piece of the action in India and China, in the absence stable and progressive governance, it would be difficult to reap the benefit.



Commentary by  
*Khondaker Muzammel Huq*  
Managing Director, Enterprise  
Development Company Ltd.

Addressing how Dhaka would function in thirty years is more important now than it was anytime in last thirty years. At the same time, few cities have a more uncertain likely trajectory. I see three possibilities; (a) the economy grows at the same rate as neighboring India and the political system gradually becomes more mature, accountable and stable, Bangladesh becomes an important hub for Asian trade and service with Dhaka central to this; (b) the city continues to grow in population with little planning, solutions for its problems are addressed with myopic vision and it continues as it does today and; (c) the city descends into disarray, engulfed by social, economic and political chaos as politicians and small groups with vested interest look into their narrow interests making Dhaka lose its focus and causing the economy to slump.

The challenges are acute – textile laborers protesting for better living standard is a reflection of an inadequate support system, and natural hazards such as cyclones, droughts and floods are frequent in Bangladesh. Environmental challenges, already serious due to lack of management, are likely to increase in the face of climate change. However, the country is resilient and has great potential. It is important to establish a positive image of the country, and restoring the image of Dhaka is the first move in that process.

## Challenges

- Rapid unplanned urbanization, crime and natural and man-made disasters such as annual urban flooding are impacting the functioning of Dhaka's industries.
- Environmental degradation – depletion and contamination of underground water reserves, wetland encroachment, and land subsidence – continues to threaten living conditions.
- With projected sea-level rise over the next 150 years, Dhaka will see ever-increasing population growth with migration from endangered coastlines and further contamination of its water supply from salt-water intrusions.

## Facts

In the 1970s Dhaka's population was around 1.5 million. Today, there are more than 15.4 million living in the metropolitan area – a number projected to grow to 21.1 million by 2015 when the city will take fourth place among the world's megacities.

The garment sector accounts for the direct employment of more than 1.5 million people in Bangladesh, of which 80% are women.

37% of the city's population are slum dwellers who are occupying only 4% of the city's 360 square kilometer area.

Biomass fuel is burnt in these more than 3000 slums, contributing to the city's serious air pollution.



## Program details

Location: Hotel Åkerblads

Moderator:

*John Kao* (Kao & Company, USA)

### 09.00 – 11.45 Thursday 29 June

*Khondaker Muzammel Huq* (EDCL, Bangladesh)

*Manzoor Hasan* (BRAC, Bangladesh)

*Elisabeth Dean-Hermann* (Rhode Island Design School, USA)

### 09.00 – 11.00 Friday 30 June

*Iqbal Quadir* (MIT, USA)

*Inge Kaul* (UNDP, USA)

### 09.00 – 11.30 Saturday 1 July

Designing future strategies

# Design Workshop

## Lake Tonle Sap - Cambodia

*Tonle Sap is a fresh water lake in Cambodia often called the pulsating heart of the Mekong. The lake, a declared biosphere reserve, behaves like a naturally regulated dam, storing water in the wet season and releasing it for downstream use in the dry season. This regulates the balance between fresh water and salt water in the Mekong Delta, which is the “rice bowl” that feeds the entire lower Mekong region.*

During the wet season the lake expands 3 to 6 fold, flooding the surrounding plains, bringing nutrients and increasing the oxygen content of the water. This sustains fish stocks, paddy production, forestry, aquatic wildlife, and ecosystem diversity, and indirectly all the major sources of livelihood of the communities that live near the lake. The outflow of the water in the dry season not only flushes out the system, it also regulates the downstream flow especially in the Mekong delta. The complex ecosystem of the floodplain supports local livelihoods in myriad ways. The foremost resource is fish. Tonle Sap’s annual yield of 230,000 tons constitutes half of Cambodia’s total freshwater capture fisheries production.



However, the Tonle Sap provides an inadequate living for most of the inhabitants of the floodplain and people living on the lake are the poorest in Cambodia. Morbidity and mortality is high since people frequently rely on pond water for drinking: children suffer from repeated attacks of diarrhoea.

The current economic activities far exceed the natural carrying capacity of the lake ecosystem; and conversely, resource based activities alone are no longer capable of supporting the lives and livelihoods of the growing local population. The ecosystem is itself under threat from these very processes and unlikely to be able to maintain its current carrying capacity. There is evidence of overfishing by groups operating at different scales, the coverage of flooded forests is shrinking, and several species are threatened or endangered.



### Wider Context

The fragility of both the Tonle Sap Lake ecosystem and the communities living in its floodplain, illustrates the impact any changes to water use along the course of this great river system would have. The Mekong River sustains very large populations living at subsistence levels but is also seen as crucial to large scale economic development through irrigation and hydroelectric power in each country through which it passes: China, Myanmar, Laos, Thailand, Cambodia and Vietnam.

Since the mid-1990s, the Mekong Delta and the Tonle Sap Lake in particular have acquired considerable salience in policy discussions in the development community. As a result, the region has been targeted by various development agencies through grants for research, community development, livelihoods enhancement, civil society support, as well as loans for infrastructure investment and other development activities. International environmental NGOs have established special programs for the conservation of the complex ecosystem of the Lake. The Mekong River Commission was set up to improve the cross boarder dialogue.

The lake is therefore at the centre of a large set of competing development visions not always easily reconciled. Several groups are inadequately represented in this process, being either too weak or insufficiently organised to bring their interests to the table. Inadequate efforts have been made to build the dialogue that could contribute to an integrated vision for the region.



Commentary by  
*Mak Sithirith*  
Executive Director, Fisheries  
Action Coalition Team (FACT),  
Cambodia

Tonle Sap Lake of Cambodia is showing signs of resource degradation. Although famous for its rich fisheries, recent catches have declined in weight, from 10-20 kg per day in the last 10 years, to about 5 kg today, with each catch constituting more small fish than ever. This situation arises from increasing over-exploitation and is becoming a source of conflict between different groups, particularly between small-scale fishermen and the large commercial concerns.

At the community level, grassroots organizations are needed in the Tonle Sap Lake to enable locals to make their voices heard and to create a sense of ownership of the area by community members. This would improve local management of resources and help them to resist the destruction of resources by outsiders.

Efforts have been made to address these issues by both Government and non-governmental organizations. NGOs have been providing support to poor fishing communities around the lake, while the Asian Development Bank (ADB) has targeted support on a lake-wide basis. While welcomed by the Royal Government of Cambodia, NGOs and communities around the lake, ADB program implementation suffers from weak governmental institutions and limited capacity, leading to disappointing outputs. As a powerful lending institution, the Bank could place a condition on their loan to pressurize the Government into addressing these issues.

## Challenges

- The Mekong River Delta needs effective trans-boundary water system management to resolve the conflicting interests of countries through which the river passes.
- Improved local governance is needed to alleviate the profound poverty in the region and enable sustainable growth with the limited resources of the Lake.
- The fishing community lacks credit services. Small scale NGO credit programs have played a significant role in addressing the gap of capital shortage, but large credit programs are needed for the entire lake community.

## Facts

During the wet season (May to October): the surface area of Tonle Sap expands from 2,700 square meters to between 9,000 to 16,000 square kilometers, and the average water depth rises from 1 meter to 10 meters; this varies year on year.

Tonle Sap provides for over 3 million people, of which about a million people live directly on the lake.

38% of the population lives below the poverty line, higher than the national poverty line of 36%.

Communities on the lake have developed coping mechanisms to live with the annual cycle of flooding, which often lasts for up to six months a year.

When floods are deeper than normal, unexpectedly fast in onset, or unusually prolonged, they can tax community self-reliance and coping capacity. The lake is prone to heavy swells and high waves in the wet season that are liable to topple their floating structures.



## Program details

Location: Hotel Klockargården

Moderator:

*Michael Vatikiotis* (HD Centre, Singapore)

### 09.00 – 11.45 Thursday 29 June

*Mak Sithirith* (FACT, Cambodia)

*Touch Sieng Tana* (Secretary of State, Cambodia)

*Johan Rockström* (Stockholm Environment Institute)

### 09.00 – 11.00 Friday 30 June

*Annika Söder* (Foreign Affairs Ministry, Sweden)

*Kumi Naidoo* (Civicus, South Africa)

*Tariq Banuri* (SEI, Thailand)

*Long Sochet* (Fisherman, Lake Tonle Sap, Cambodia)

*Um Meng* (Fisherman, Lake Tonle Sap, Cambodia)

*Hut Han* (Fisherman, Lake Tonle Sap, Cambodia)

### 09.00 – 11.30 Saturday 1 July

Designing future strategies

# Design Workshop

## Guangdong – China

*The Pearl River Delta area of Guangdong is one of the strongest economic regions in China. Its export value represents at least 30% of the total of Mainland China. This region provides a useful window to assess the impact of very rapid development in China.*

A factory manager in Guangdong complains, “My biggest problem is electricity shortage. We had 454 hours without power last year and it’s not getting better. I just got a letter from the electricity company telling me when I won’t have power from the grid during the next two months. I have to run our own generator, which I know pollutes badly, but what can I do? Labour costs are also rising. If I don’t improve conditions workers will leave. Maybe I should just move my plant somewhere else.”

Guangdong is the highest energy consuming province. Despite a dramatic increase in electricity capacity from 2.53 GW in 1978 to nearly 40 GW by 2004, it is experiencing serious power shortages. Factories operate their own private on-site generators burning all kinds of fuels and, coupled with increasing household demands for electricity and the rapid rise



in vehicle use, air pollution has become pervasive and serious.

Indicators such as rising coal mining and other industrial accidents reveal that Guangdong is operating at over-capacity. There are reports of corruption, for example officials taking private land for development without providing compensation. Protests are straining the administrative capacity of the authorities. Nationally, there were over 80,000 officially-acknowledged protests last year, including those against polluting industries, with people complaining that their long-term health was at risk.

The authorities have used repressive methods to quell protests, pressurizing journalists to silence them, and cyber-policing is now in place across China. Thus, serious human rights violations exist against a backdrop of a growing civil society movement.



### Wider Context

In the space of a few years, China is experiencing transitions that elsewhere have taken decades and triggered large-scale conflict; deploying capital and building infrastructure faster than any society in history. This is creating intense social and environmental stresses, both for China itself and globally. A successful China will be an essential stabilising factor in a globalised economy. An unstable China would be globally disruptive. This poses a dilemma, both for China and its partners. Chinese leaders cannot take their feet off the accelerator without risking instability but keeping the

economy growing rapidly on a business as usual path is just as dangerous.

The Chinese leadership has set ambitious targets for energy efficiency and renewable energy, but even these cannot offset serious local environmental and health problems and significant pressure on global warming from future emissions.

Among the challenges there are also opportunities to explore. Recognizing this, China and the EU signed a framework agreement in 2005 addressing issues such as capacity building, training and joint research into new technologies. This agreement includes a concrete commitment by the EU to help build a demonstration plant for carbon capture and storage (CCS) in China. The target date for completion is 2020. The agreement represents a multilateral effort to encourage carbon-neutral technological innovations. However, to be successful, substantial capital will be needed, as well as national and international government-private sector coalition-building.



Commentary by  
*Christine Loh*  
CEO, Civic Exchange, Hong  
Kong

In the late 1970's, China embarked on a modernisation drive that may emerge as the greatest economic success story in history. The success has much to do with re-creating markets, and setting incentives that encourage personal effort and innovation. Reformers broke up huge state-owned enterprises to create competing companies, and gradually opened domestic markets to international competition. China's economy is now part of the global system.

Market-supporting mechanisms and institutions, such as banks, commercial law, courts, stock exchanges, etc were created and the reins of central planning gradually lightened. The increasing external costs of development, such as environmental degradation, and sociopolitical change now require urgent attention.

A systems approach is necessary to ensure positive outcomes for all of society from this economic miracle. Improved industrial safety, public health, environmental justice and human rights demand determination at the top of China's political hierarchy, local buy-in by authorities, collaboration by industries, and public support with the help of civil society. International support, both financial and political, is a crucial ingredient. What is lacking is clarity of focus and energy is the ideal place to start. This Workshop uses Guangdong, with the existing EU-China energy agreement, to explore this challenge.

## Challenges

- Coal will remain China's most important energy source for the foreseeable future. As this is the most polluting fuel, it is critical to address every environmental aspect of production and usage to protect air quality, the climate and public health.
- Carbon Capture and Storage (CCS) technology is a potential solution for eliminating the release of carbon dioxide during energy production with coal. The estimated cost of building a CCS demonstration plant is in the hundreds of millions. In parallel, China's 11th Five Year Plan (2006-2010) calls for improving energy efficiency by 20 %.

## Facts

Energy consumption in Guangdong, the most developed area in China, is currently at 70% OECD average, but is rising.

China is estimated to have built the equivalent of 101GW just in the 18 months to mid 2005 – which is 70GW a year. This excludes unregistered local plants, which probably add another 10-20% Most of them will be coal-based although plans to increase the usage of natural gas and nuclear are going to be substantial in real terms.

According to the Chinese State Administration of Work Safety, China accounts for some 80 per cent of the world's coal mining deaths—despite producing just 35% of the world's coal. The number of deaths in Chinese mines is variously estimated as 8,000 or 20,000 per year.



## Program details

Location: Green Hotel

Moderator:

*Christine Loh* (Civic Exchange, Hong Kong, China)

### 09.00 – 11.45 Thursday 29 June

*Christine Loh* (Civic Exchange, Hong Kong, China)

*John Ashton* (Special Representative for Climate Change, British Foreign Office)

*Pan Jiahua* (Chinese Academy of Social Sciences)

### 09.00 – 11.00 Friday 30 June

*Khalid Malik* (UNDP, China)

*Robin Munro* (China Labor Bulletin, China)

### 09.00 – 11.30 Saturday 1 July

Designing future strategies