



ARAB COMPANIES IN THE 21ST CENTURY

طارق امطيرة TAREQ EMTAIRAH
SUZANNE PÄHLMAN AND DENNIS PÄMLIN

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OIL REVENUES,
URBANISATION
AND EMERGING
ECONOMIES
- CONVERGING
OPPORTUNITIES
FOR GLOBAL
LEADERSHIP

THE CASE OF THE UNITED ARAB EMIRATES

TAREQ EMTAIRAH, DENNIS PAMLIN, SUZANNE PÄHLMAN

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The study, undertaken in the United Arab Emirates (UAE), is inspired by a series of initiatives undertaken by WWF with an intention to identify and to work with various proactive key players in emerging economies of the world like India, China, Russia, Brazil and South Africa. This study focuses on the scope and potential for companies in the UAE and the rest of the Arab world to emerge as leaders in investment and export of sustainable goods and services, as well as becoming a key international actor in promoting and supporting sustainable development.

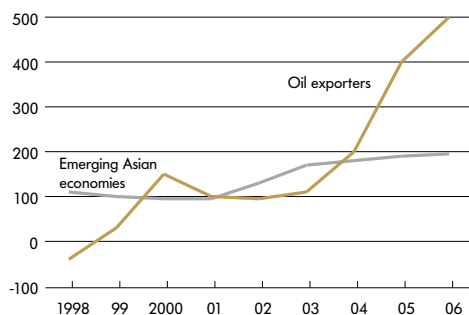
EXECUTIVE SUMMARY

In January 2006, with prices averaging US\$ 60 per barrel, oil revenues in the Gulf Cooperation Council (GCC), reached US\$ 23.15 billion.^{1|2} During the same month, the world's population increased by more than six million people, and statistics were released by the China Automotive Industry Association which indicated that China surpassed Japan as the second-largest auto market in the world, behind the US.^{3|4} These three events illustrate trends, high-

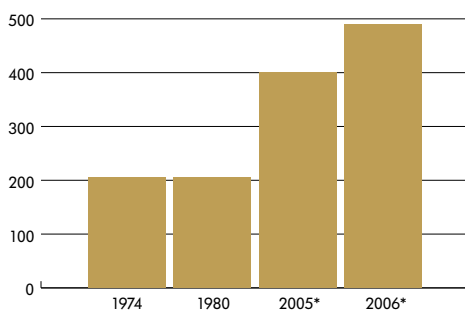
lighted in the findings of this report, which can provide an opportunity for Arab companies to play a key role in the international economy, as countries search for resource-efficient urban solutions.

Drowning in oil

Current-account in surpluses 5bn



Oil exporters' current-account surplus 5bn in 2005 prices



Sources: IMF; *The Economist* estimates

* Forecast

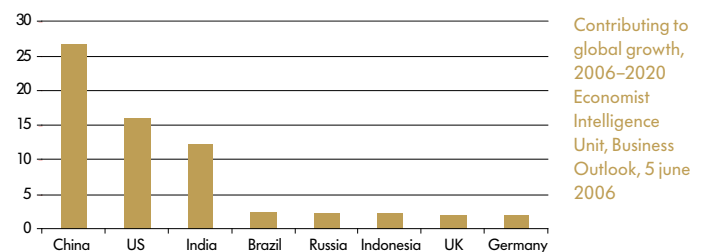
The Economist, Nov 10th 2005

The first trend relates to oil and oil revenues. The doubling of oil prices from 2002 to 2006 has created significant wealth in the Gulf region. The International Monetary Fund (IMF) estimated that in 2006 the current account surplus of the Middle Eastern oil exporters will be larger, in dollar terms, than that of China and the rest of emerging Asia put together.⁵ The increase in oil prices also affects the global business community. In 2006, five of the top ten companies on Fortune's Global 500 were oil

companies. Another four were automakers, whose customers of course rely on oil-based fuels.⁶

The second trend that can be identified relates to the increasingly rapid urbanisation of the world's population. For the first time in history, the human race is approaching a situation in which more people live in cities than rural areas. Exactly when this point will be reached is unclear, but according to the United Nations Population Division, humanity is likely to cross this historic threshold sometime during 2008.⁷ Over the coming decades, therefore, almost all of the population growth will be in cities, resulting in a situation where approximately two billion additional people will live in cities by 2030.⁸ In China alone, the urbanisation rate increased from 17.4 percent in 1978 to 41.8 percent in 2005.⁹ Official statistics in China indicate that approximately ten million people move from rural areas to cities each year.¹⁰

The third trend concerns the geopolitical and economic changes currently occurring in the world due to the emergence of China and India as economic super powers. It is forecast that by 2040, China will be the world's largest economy, and India the third largest.¹¹ The graph to the right shows predicted economic growth until 2020, and from this it is apparent that China and India are becoming key actors in the global economy.



At the same time that these three trends are becoming increasingly apparent, it is true to say that developed nations continue to consume resources in a manner which is impossible for the rest of the world to emulate; there simply do not exist sufficient natural resources to provide welfare for the entire planet in this way.¹²

Academics and environmental NGOs have long tried to raise awareness with governments and businesses, on an international level, that it will prove impossible to address poverty in the developing world without major changes in the worldwide patterns of natural resource consumption. With the emergence of China and India, as mentioned above, the prospect of global resource scarcity is coming increasingly into the spotlight.

The world does not have the resources for another 5 billion people or so to behave the way that Americans do today. It may not be about to run out of energy and commodities, but higher prices will certainly force big changes in lifestyles. The era of cheap raw materials is over.
The Economist, September 2006¹³

In this context, no effort to promote global sustainability can ignore the oil exporting Arab countries. These countries are significant in several ways, but two areas in particular make them potential global leaders in the provision of solutions to many of the sustainability challenges which presently confront society.

The first of these areas relates to the decisions being made by these countries in terms of investing the enormous sums of money that high oil prices have delivered. The figures in this regard are sometimes difficult to grasp. Between 2003 and 2005, the ten major Middle Eastern oil exporters increased their export revenues from US\$ 200 billion to US\$ 450 billion. Forecasts for 2006 estimate that oil revenues may exceed US\$ 500 billion, a figure 150 percent higher than 2003.¹⁴ If invested strategically, this income could provide a major contribution to global sustainability, as well as promoting sustainable development in the Arab world.

Secondly, and very much linked to the first point, these countries are transforming extremely rapidly in terms of urbanisation and diversification of their economies. As a result, they are well-placed to assume global leadership in a transition towards sustainable urban solutions. A number of countries in the region have implemented policies aimed at diversifying their economies away from oil dependence. As a result, Arab companies are not only creating strong brands within Arab countries, but are gaining increasing recognition worldwide.¹⁵

At the same time, as a result of this trend, many of the countries in the Gulf region are facing a very rapid transition to highly urbanised societies. This transition will provide these countries with the opportunity to create urban solutions that are sustainable from the outset, rather than focusing upon the incremental improvements in sustainability which often occur in developed countries. Mired as they are in unsustainable infrastructure and consumption patterns, stakeholders in these developed countries often focus on “cleaning up the mess” that already exists, instead of ensuring it never arises. The right investments over the coming decade would therefore allow the emerging economies in the Middle East to become world leaders in providing solutions to one of the most important challenges facing modern society, namely sustainable urban solutions.

Overview of responses to the questionnaire¹⁶

- i. The study indicates the existence of a group of companies that has assumed a leadership role within the UAE. Of the respondents, 48 percent stated they abide by the laws and regulations linked to environmental protection by following the standards, while a significant percentage (28 percent) felt that they are going beyond these standards. Furthermore,

16 percent of the companies responded to the effect that they are going beyond the standards and suggesting new tougher standards. The fact that these types of leaders exist was further confirmed during interviews and discussions with key stakeholders.

In this regard, a number of similarities exist between the UAE and the two major emerging economies of China and India. In India, 19 percent of respondents felt that they exceed the environmental standards, while a significant majority (72 percent), comply with the applicable environmental laws and judicial decisions. In China, 13 percent of companies responded to the effect that they were going beyond the standards and suggesting new and tougher standards, while 66 percent felt that they were following the standards and 22 percent that they were going beyond the standards.

- ii. When asked “How would you rate UAE/Arabic companies in general in terms of abiding by the laws and regulations for environmental protection?” the companies were requested to respond according to different categories. For the category “Breaking laws”, 28 percent of companies felt that either “many” or “very many” of their peers were guilty of such behaviour, compared to 40 percent who thought that “few” or “very few” do so. However, 32 percent of the companies chose not to respond to this question. For the category “Going beyond”, 72 percent replied that “few” or “very few” companies exhibit such behaviour, compared with 4 percent who felt that “many” do so. None of the respondents were of the opinion that “very many” companies go beyond the requirements, while 26 percent again chose not to respond.

In the comparable WWF study in India, 66 percent of the respondents asserted that either “many” or “very many” companies break the laws, compared to 44 percent who thought that “few” or “very few” do so. In the category “Going beyond” 83 percent replied that “few” or “very few” do so, compared with the 17 percent who felt that “many” or “very many” do this.

In China, 39 percent of the companies were of the opinion that either “many” or “very many” break the laws, while 61 percent thought that “few” or “very few” do so. In terms of “Going beyond” the regulations, 69 percent of companies responded that “few” or “very few” of their peers do so, compared with the 31 percent who said that “many” or “very many” companies exhibit such behaviour.

- iii. The contrast between the behaviour that companies report as their own, on the one hand, and the manner in which they perceive other companies on the other, is noteworthy. This discrepancy may be ascribed to a number of factors. In the first instance, such a study presumes an element of self-selection, in that those companies responding to the survey in all likelihood possess a higher than usual awareness of, and interest in, sustainability issues. Secondly, companies may be guilty of overestimating their own performance and underestimating that of their competitors. Thirdly, media reporting tends to focus upon those companies breaking the law, rather than those going beyond the legal requirements, thereby creating an impression that non-compliance is more widespread than is truly the case.
- iv. Almost three quarters (72 percent) of the companies that participated in the study expressed a willingness to cooperate with an organisation such as WWF in order to promote sustainable development within the UAE, as well as internationally. This figure is very close to that of India (73 percent), but much higher than was the case in China (53 percent).

POSSIBLE STEPS FORWARD¹⁷

Arab companies:

1. Companies wishing to contribute to sustainability could cooperate with government and NGOs in order to ensure that an overarching investment and export framework is developed that supports sustainable development.
2. Companies with sustainable goods and services for export could collaborate with government and NGOs to develop export strategies in specific sectors such as information and communication technology (ICT), construction and energy services.
3. Progressive companies might select a limited number of concrete projects located in the Arab world and beyond, implement these and communicate the results to key stakeholders. These projects should be linked to the core business of the companies rather than being simply philanthropic.
4. Companies that wish to contribute to sustainable development could utilise relevant fora to highlight key areas of activity and possible means of progress in these areas. Within the Middle East, such fora could include the Arab Strategy Forum, Gulf Cooperation Council conferences, or the newly initiated Abu Dhabi Economic Forum. Foreign fora should also be utilised, particularly to build stronger ties with China, and in this regard

the following events may provide opportunities to communicate new ideas and plan concrete actions for sustainable development: the BOAO Forum for Asia, the China Beijing International High-Tech Expo/China Economic Summit, the China International Fair for Investment & Trade (CIFIT), the China–ASEAN Expo and the Chinese Export Commodities Fair (Canton Fair).

The UAE government and authorities:

1. Authorities might initiate a sustainable cities dialogue with China and India in which strategies for investments in urban solutions are jointly developed.
2. Support could be provided for initiatives where UAE/Arab companies establish joint initiatives with key actors in emerging markets.
3. The possibility of developing a sustainable investment strategy for the UAE could be further explored. This might include both domestic policy development, aimed at promoting sustainable urban solutions, as well as criteria for international investment to address the resultant increase in demand for such solutions.

Foreign governments and companies:

While there exists a general global consensus that current production and consumption patterns are not sustainable, most foreign governments have only focused on the Middle East as a source of fossil fuel. The demand for increased oil production without any engagement regarding sustainability is striking. This was seen, for example, in the aftermath of hurricane Katrina. High pressure was put on the Organisation of Petroleum Exporting Countries (OPEC) to increase its output as US production capacity was damaged. A month after the hurricane, G7 ministers called upon oil producing countries to make more oil available, since they alleged that high oil prices posed a risk to global growth.¹ The following day, the UAE's Energy Minister stated that the UAE would increase its refining capacity in order to produce more oil.¹⁹

The following are steps that should be considered by foreign governments:

1. Foreign governments and companies that have a relationship with the GCC countries should develop strategies supporting diversification into more sustainable industries within these countries.
2. For each of the recommendations for Arab companies and the UAE government, foreign governments and companies should explore means by which they can support Arab companies that are taking the lead regarding sustainable development.

3. Foreign governments might investigate means by which changes in domestic regulations can promote the importation of sustainable goods and services from the UAE. A concrete example in this regard is public procurement policy.
4. Similarly, foreign companies could examine their supply chains as well as their UAE customers in order to ensure that they are supporting progressive companies within the UAE.

FIVE PROJECTS TO EXPLORE

In order to explore the potential of Arab companies to play a more prominent global role in providing sustainable welfare, WWF will explore the interest which exists in five projects that, during the compilation of this report, have attracted interest from several quarters. These projects will provide the opportunity for WWF to support many of the “steps forward” presented above, and can be described as follows:

1. Developing material for the Arab world regarding global sustainability challenges and the potential which exists within the region to resolve these.
2. Promoting Arab leadership in addressing global challenges such as increasing international energy demand.
3. Collaborations with emerging economies aimed at supporting export opportunities for innovative solutions.
4. A better understanding of the Arab world.
5. Exploring the potential of Arab cultural concepts as guiding principles for sustainable business innovation within the UAE and internationally.

These projects are described in detail in Chapter Five.

THREE INITIATIVES:

In order to promote broader Arab leadership in sustainable development, various projects should be supported through an overarching framework. The three initiatives below are distinct in nature and require the involvement of different stakeholders, but all three are intended to contribute toward a broader framework for global sustainable leadership. These initiatives could utilise the UAE as a starting point, but in the wider context of Arab leadership, should also be extended to other countries in the region. The initiatives in question are as follows:

A. The establishment of a Sino-Arab axis for global sustainability

The objective of this initiative is to explore the possibilities for collaboration between key actors from GCC and China, as well as other emerging economies, in the field of sustainability. This will involve identifying areas in which both countries possess expertise and/or potential and from which both can gain an advantage in the form of becoming key exporters of sustainable solutions.

B. Urban solutions for the 21st century

This initiative is aimed at the development of roadmaps to explore innovations that can move societies beyond incremental improvements in sustainability. The outcomes of the initiative should be practical tools that can be used both to develop new goods and services, and to highlight the barriers that exist for companies to move towards sustainability. A particular focus will be on the means by which foreign companies and governments can support innovation in the Arab world that contribute to globally significant resource savings.

C. Strategic investments for innovation

The objective of this initiative is to develop a strategy through which GCC investments can contribute to global sustainability. Instead of following a pattern of specialised regional or domestic investments and applying the same model when investing internationally, a comprehensive investment strategy could contribute to innovation, increased welfare and resource efficiency, especially for urban areas. Leading stakeholders can explore means by which a limited number of strategic projects in the GCC, combined with strategic foreign investments, can create new markets with a high international sustainability profile.

These initiatives are described in more detail in Chapter Six.

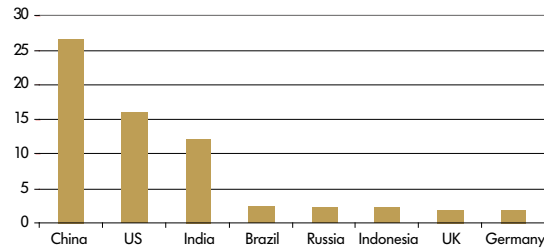
موجز التقرير

بلغت أرباح النفط في دول مجلس التعاون الخليجي في شهر يناير العام الحالي 23.15 مليار دولار أمريكي، عندما كان سعر النفط يتراوح 60 دولارا للغالون، وفي الشهر ذاته، ارتفع عدد سكان العالم ما يزيد عن 6 ملايين نسمة. وأشارت إحصائية صادرة عن نقابة مصنعي المركبات في الصين إلى أن الصين تفوقت على اليابان كثاني أكبر سوق لصناعة السيارات في العالم بعد الولايات المتحدة الأمريكية. هذه الظواهر الثلاثة تدل على مؤشرات مستقبلية يعالجها هذا التقرير، والتي يمكن أن توفر فرصة للشركات العربية لتلعب دورا أساسيا في الاقتصاد العالمي، وخصوصا أن كثير من الدول تبحث عن حلول مستقبلية ذات كفاءة عالية في مواجهة التوسع العمراني وازدياد الطلب على المصادر الطبيعية .

تتعلق الظاهرة الأولى بالنفط وأرباحه، إذ يذكر أن ارتفاع أسعار النفط إلى الضعف منذ عام 2002 وحتى عام 2006 خلق ثروة طائلة في منطقة الخليج. وقدر صندوق النقد الدولي IMF أن فائض الحساب الجاري لمصدري النفط في الشرق الأوسط سيزيد هذا العام (بقيمة الدولار الأمريكي) بنسبة أكبر من الصين ودول آسيا الناشئة، مع العلم أن ارتفاع سعر النفط يؤثر بشكل كبير على المجتمع الاقتصادي العالمي. وتصدرت شركات النفط قائمة الشركات العشرة الأولى من الشركات العالمية الثرية التي يبلغ عددها 500 شركة عام 2006، حيث أن خمسة من بين أكبر عشر شركات في قائمة (Fortune 500) كانت شركات نفط وأربعة شركات في صناعة المركبات التي يعتمد زبائنها على النفط/ البترول.

وأما الظاهرة الثانية، فإنها ترتبط بزيادة التمدن السريعة عالميا. إذ أن الإنسانية لأول مرة في التاريخ تتجه نحو واقع سيعيش فيه السكان في المدن أكثر من العيش في المناطق الريفية. ورغم أن التوقعات المحددة للوصول إلى هذا الواقع غير مثبتة بعد، ولكن تتوقع وحدة قسم السكان في الأمم المتحدة أن الإنسانية ستتجاوز هذا الحد التاريخي بحلول عام 2008. وعلى إثر ذلك، سيتجه النمو السكاني خلال العقود المقبلة للعيش في المدن، ما سينتج عنه زيادة عدد السكان الذين يعيشون في المدن 2 مليار نسمة على الأقل بحلول عام 2030. وفي الصين وحدها، ارتفعت نسبة التمدن من 17.4% في عام 1978 لتصل إلى 41.8% عام 2005. وتشير الإحصائيات الرسمية في الصين أن حوالي 10 مليون نسمة ينتقلون من مناطق ريفية للعيش في المدن سنويا.

إلى ذلك، ترتبط الظاهرة الثالثة بالتغيرات الجيوسياسية و الاقتصادية التي تظهر حالياً في العالم إزاء نشوء الصين والهند كقوى اقتصادية عظمى. كان قد أُعلن أن الصين ستصبح بحلول عام 2040 أكبر دولة اقتصادية في العالم، في حين ستكون الهند ثالث أكبر دولة اقتصادية. ويبين الجدول البياني التالي تنبؤات النمو الاقتصادي حتى عام 2020، موضحاً أن الصين والهند يلعبان الدور الأساسي في الاقتصاد العالمي.



وعلى الرغم من أن هذه (الظواهر) الثلاثة غدت واضحة، إلا أن الشعوب المتطورة تستمر في استهلاك المصادر لزيادة رفاهية سكانها بشكل يستحيل معه أن يضاهيها بقية من في العالم، ما سينتج عنه عدم توفر المصادر الطبيعية الكافية لتوفير الرفاهية لجميع السكان على وجه الأرض. وطالما حاولت المنظمات البيئية وأكاديميون توعية وتحذير الحكومات والاقتصاديين من استحالة حصر الفقر في العالم النامي بدون تغييرات أساسية في أنماط الاستهلاك وكيفية استغلال المصادر الطبيعية. وفي ظل نشوء الصين والهند، كما ذكر سابقاً، فإن احتمالات شح المصادر العالمية سيصبح مسألة أساسية وبارزة.

"لا يملك العالم المصادر الكافية لخمسة مليار نسمة ليعيشوا بنفس الطريقة التي يعيشها الشعب الأمريكي. ربما لن يبلغ درجة نفاذ مصادر الطاقة أو الموارد، ولكن ارتفاع الأسعار وغلاء المعيشة سيفرض أنماط حياة جديدة، فحقيقة وجود مواد خام رخيصة قد انتهت." مجلة الاقتصادي، عدد 16 أيلول 2006

وفي هذا السياق، لا يمكن للجهود الرامية إلى تحقيق النمو المستدام في العالم أن تتجاهل الدول العربية المصدرة للنفط، فهذه الدول هامة في عدة جوانب، ولكن هناك جانبان يوفران فرصا استثمارية لهذه الدول لتلعب دورا رياديا عالميا قادرا على إيجاد حلول لكثير من التحديات التي تواجه المجتمع الدولي حاليا بالنسبة للتنمية المستدامة.

الجانب الاول يرتبط بالقرارات التي تتخذها هذه الدول حول استثمار العوائد المالية من ارتفاع أسعار النفط. الأرقام المتعلقة بهذا الموضوع – مع العلم انه يتعذر في بعض الأحيان الحصول على الإحصائيات الدقيقة- تشير الى أن الزيادة في أرباح مصدري النفط العشرة الأساسيين في الشرق الأوسط ارتفعت من 200 مليار دولار إلى 450 مليار دولار خلال عامي 2003 وحتى 2005. وقدرت تنبؤات عام 2006 أن أرباح النفط ستتجاوز 500 مليار دولار نهاية العام الجاري، أي بنسبة ارتفاع 150% عن عام 2003. وإذا تم استثمار هذه الأموال استراتيجيا، فإنها ستوفر مصدرا أساسيا لمشاريع اقتصادية تلبي احتياجات التنمية المستدامة في العالم كما ستحقق عوائد ترفد الاستدامة في العالم العربي.

ويمكن أن نعزو الارتفاع الدراماتيكي في أسعار النفط خلال عام 2005 لعدة أسباب، منها الطلب الشديد على النفط من قبل الصين، وعدم الاستقرار السياسي حاليا في بعض دول الشرق الأوسط، إضافة إلى سلسلة الأعاصير التي ضربت خليج المكسيك وتسببت في تدمير مواقع إنتاج النفط.

الجانب الثاني يتعلق بالتحويلات الاقتصادية والاجتماعية السريعة في المنطقة. حيث تشهد دول الخليج تحولا جذريا وبشكل سريع بموجب التمدن والتوسع العمراني وتنويع اقتصادها، وفي هذه الحالة يمكنها أن تلعب دورا رياديا عالميا للانتقال نحو حلول التمدن المستدامة. ومما يساعد هذه الدول في أن تلعب دورا رياديا هو بزوغ شركات عربية عالمية. فقد طبقت بعض الدول في المنطقة سياسات تهدف إلى فصل اقتصادها عن النفط، ما نتج عنه أن بعض الشركات العربية في المنطقة أوجدت علامات تجارية قوية داخليا إلى جانب أنها أصبحت تحظى باهتمام على المستوى العالمي.

وبالتركيز على ظاهرة التمدن، كثير من دول الخليج تواجه توسعا عمراني بشكل كبير وسريع في مجتمعاتها، وهذا التحول يمنحها الفرصة لإيجاد حلول مستدامة لظاهرة التمدن منذ البداية، على عكس ما يحدث في الدول المتقدمة التي ركزت جهودها على تطوير حلول جزئية لمعالجة أخطاء الماضي. وفيما

تعاني هذه الدول من بنى تحتية وأنماط استهلاكية غير مستدامة، إلا أن أصحاب رؤوس الأموال والمستثمرين في هذه الدول يشددون دائما على التخلص من المشكلات الموجودة بدلا من سعيهم إلى ضمان عدم نشوب أي مشكلات بالأصل. ولهذا، فإن الاستثمارات الصحيحة خلال العقد المقبل سيمنح الاقتصادات الناشئة في الشرق الأوسط ريادة عالمية في إيجاد حلول مستدامة لظاهرة التمدن التي تعد أبرز المشكلات التي تواجه المجتمع الحديث.

لمحة موجزة من نتائج الاستبيان:

1. أشارت نتائج الدراسة إلى وجود مجموعة من الشركات التي انتحلت دورا قياديا في الإمارات في مجال حماية البيئة بحسب الاستبيان الذي توصل إلى أن 48% من الشركات تتقيد بالقوانين والتشريعات المتعلقة بحماية البيئة من خلال التزامها بالمعايير، في حين أن 28% شعرت أنها تفوق المعايير منها 16% طالبت بتشديد معايير حماية البيئة. هذه المواقف تم استشعارها أيضا من خلال اللقاءات التي تمت مع أبرز المساهمين في الشركات.

وفي هذا السياق، تبين وجود تشابهات بين الإمارات والصين والهند. ففي الهند، تشير دراسة سابقة أجريتها أن 19% من الشركات ارتأت أنها تفوق معايير حماية البيئة، في حين أن 72% ادعت أنها تلتزم بقوانين البيئة والتشريعات النافذة. وأما الصين، فإن 13% من الشركات التي ادعت أنها تفوق المعايير طالبت بمعايير أكثر شدة، في حين أن 66% من الشركات شعرت أنها ملتزمة بالمعايير وأن 22% لا تلتزم.

2. عند طرح السؤال "كيف تقيم الشركات العربية في الإمارات عموما من حيث تقيدها بقوانين وتشريعات حماية البيئة؟" في الاستبيان، طُلب من الشركات أن تجيب حسب عدة بنود. فتحت بند "خرق القوانين"، اعتبرت 28% من الشركات أن "كثير" أو "كثير جدا" من نظيراتها تخرق قوانين حماية البيئة، في حين أن 40% اعتبرت أن "قليل" أو "قليل جدا" مذنب، غير أن 32% من الشركات فضلت عدم الإجابة على هذا البند. وأما البند الثاني "تفوق القوانين"، تبين أن 72% الشركات أجابت أن عدد "قليل" أو "قليل جدا" من الشركات تبدي أو تظهر هذا السلوك مقارنة مع 4% من الشركات فقط التي تشعر أن "كثير" منها تظهره.

ولم تسجل أي إجابات أو آراء بأن هناك عدد "كبير جدا" من الشركات لا تلتزم بالمتطلبات والمعايير، في حين أن 26% اختارت عدم الإجابة على هذا البند.

وأشارت دراسة مشابهة (WWF) أجريت في الهند إلى أن 66% من الشركات أكدت أن عدد "كبير" أو "كبير جدا" يخرقون القوانين، في حين أن 44% ترى أن "قليل" أو "قليل جدا" من الشركات لا تخرق القوانين. وتحت بند "تفوق القوانين" أجابت 83% من الشركات أن عدد "قليل" أو "قليل جدا" تظهر هذا السلوك، و17% أجابوا بأن "كثير" أو "كثير جدا" من الشركات تفوق القوانين.

وأما في الصين، فإن 39% من الشركات أشارت إلى أنه إما "كثير" أو "كثير جدا" من الشركات تخرق القوانين، في حين أن 61% تعتقد أن "قليل" أو "قليل جدا" لا تخرقها. وبالنسبة لبند "تفوق القوانين"، تبين أن 69% من الشركات أجابت أن "قليل" أو "قليل جدا" من نظيراتها تفوق القوانين، مقارنة مع 31% من الشركات التي أفادت أن "كثير" أو "كثير جدا" من الشركات تبدي هذا السلوك.

3. وجدير بالذكر التباين في الإجابات بين رأي الشركات بسلوكها ورأيها بسلوك الشركات الأخرى. يُعزى هذا التباين إلى عدة عوامل أولها أن هذه الدراسة بحد ذاتها تعد عامل فرز لصالح الشركات التي لديها وعيا ورغبة في شؤون التنمية المستدامة من خلال موافقتها على المشاركة في الاستبيان. وثاني هذه العوامل هو أنه ربما تكون هذه الشركات مذنبية بالمبالغة والمغالاة في تقييم أداءها والتقليل من أداء الشركات المنافسة لها. وثالث عامل هو توجه التقارير الإعلامية إلى التركيز على الشركات التي تخرق القوانين أكثر من تلك التي تفوق القوانين، الأمر الذي يخلق تصورا بأن نسبة خرق القوانين منتشرة أكثر مما هو في حقيقة واقع الأمر.

4. حوالي ثلث الشركات أي 72%، التي شاركت في الدراسة أبدت استعدادها للتعاون مع منظمات مثل (WWF) لتعزيز التنمية المستدامة في الإمارات وكذلك في العالم. وكانت هذه النتيجة قريبة جدا من النتيجة التي توصلت إليها الدراسة في الهند (73%)، وأعلى من النتيجة التي توصلت إليها الدراسة في الصين (53%).

التوصيات المستقبلية

توصيات للشركات العربية:

1. الشركات التي تأمل بأن تسهم في تحقيق التنمية المستدامة يمكنها أن تتعاون مع الحكومة والمنظمات غير الحكومية لضمان نمو وتطوير الاستثمارات الرئيسية والصادرات ضمن إطار يدعم التنمية المستدامة.
 2. الشركات التي تملك خدمات وموارد مستدامة للتصدير يمكن أن تتحد مع الحكومات والمنظمات غير الحكومية لتطوير استراتيجيات للتصدير في قطاعات محددة مثل قطاع تكنولوجيا المعلومات والاتصالات (ICT) وخدمات الطاقة.
 3. الشركات المتقدمة يمكنها اختيار عدد محدود من المشاريع في العالم العربي وغيرها، وتنفيذها على أن تكون تلك المشاريع مرتبطة بالعمق الاقتصادي للشركات أكثر من أن تكون مشاريع خيرية أو إنسانية معتمدة على الصدقات.
 4. الشركات التي ترغب في تحقيق التنمية المستدامة يمكنها أن تستغل المؤتمرات والمنتديات لتسليط الضوء على محاور أساسية وتحقيق تقدم فيها من خلال تلك النشاطات والوسائل المتاحة. ففي الشرق الأوسط، يعد المنتدى العربي الاستراتيجي، ومؤتمر مجلس التعاون الخليجي ومنتدى أبو ظبي الاقتصادي الذي أطلق مؤخرًا، من أبرز المنتديات والنشاطات في المنطقة.
- كما ينبغي على الشركات استغلال مثل هذه النشاطات العالمية، لتفعيل روابط وعلاقات قوية مع الصين. وأبرز النشاطات والمنتديات التي توفر فرصة يمكن من خلالها طرح آراء وخطط جديدة من شأنها تحقيق التنمية المستدامة هي: ASEAN، CIFIT، BOAO.

توصيات للهيئات الحكومية في الإمارات:

1. دعوة الهيئات الحكومية إلى المبادرة بتفعيل حوارات مع الصين والهند حول المدن المستدامة، بحيث يتم تطوير استراتيجيات للاستثمار في إيجاد حلول من شأنها حماية البيئة في ظل التمدن والتوسع العمراني.
2. توفير الدعم للمبادرات لتحفيز الشركات العربية في الإمارات على تأسيس روابط مع المساهمين الأساسيين في الأسواق الناشئة.
3. تفعيل إمكانية تطوير استراتيجية للتنمية المستدامة في الإمارات، وهذا يشمل على سياسة تطوير تهدف إلى إيجاد حلول مستدامة للتمدن من

جهة، وبرنامج استثمار دولي يركز على توقعات الطلب على هذه الحلول من جهة أخرى.

توصيات للشركات والحكومات الخارجية:

1. دعوة الشركات والحكومات الخارجية ذات العلاقة مع دول مجلس التعاون إلى تطوير استراتيجيات لدعم الصناعات المستدامة في تلك الدول.
2. لكل من التوصيات الموجهة للشركات والمؤسسات الحكومية الإماراتية، هنالك دعوة للشركات والحكومات الأجنبية لبحث وسائل يمكن من خلالها أن تدعم الشركات العربية التي تتولى أولوية تبني التنمية المستدامة.
3. قيام الحكومات الخارجية بالبحث عن وسائل يتم من خلالها تغيير القوانين الداخلية بحيث تسهل استيراد واستيعاب منتجات وخدمات مستدامة من الإمارات، مثال على ذلك سياسة الشراء في القطاع العام.
4. وعلى النهج ذاته، يمكن للشركات الخارجية أن تلعب دوراً في تحفيز الشركات الإماراتية من خلال تحديد مواصفات شرائية تتضمن مفهوم ومتطلبات الاستدامة.

خمسة مشاريع مقترحة

خلال إعداد هذه الدراسة، بحثنا مع مجموعة من الفعاليات ورجال الأعمال عن إمكانية تطوير مجموعة من المشاريع التي يمكن أن تستنبط قدرات الشركات العربية لتلعب دوراً ريادياً في مشاريع التنمية المستدامة. نذكر هنا خمسة من هذه المشاريع التي يمكن لـ (WWF) أن يساهم في دفع الخطوات الأولية على الطريق لتنفيذها:

1. تطوير مادة للعالم العربي حول تحديات التنمية المستدامة والقدرات الموجودة في المنطقة لمعالجة هذه التحديات.
2. تعزيز قيادة عربية قادرة على تعريف وتوضيح التحديات العالمية مثل زيادة الطلب الدولي على الطاقة.
3. برنامج تعاون مع الدول الاقتصادية الناشئة يهدف إلى دعم فرص لإيجاد الحلول المبتكرة.
4. تفعيل دور العالم العربي.

5. استنباط المفاهيم الثقافية العربية وقدرتها على توجيه مباديء ابتكارات الاقتصاد المستدام في الإمارات وفي العالم.

مبادرات ثلاثة

بالإضافة إلى المشاريع الخمسة السابقة، تنطرق الدراسة إلى ثلاث مبادرات يمكن أن يتم تفعيلها في المنطقة. المبادرات المقترحة تختلف في طبيعتها وتتطلب مشاركة فعاليات مختلفة، ولكن في مجملها تسهم في تصور شامل لريادة عربية في مجال التنمية المستدامة. هذه المبادرات تأخذ انطلاقها من الإمارات العربية المتحدة ولكن يمكن أن يكون لها أبعاد في المنطقة. وهذه المبادرات هي:

1. تأسيس تحالف صيني- هندي- عربي من أجل دعم مشروع التنمية المستدامة على المستوى الدولي:

مبادرة من هذا النوع يمكن أن يكون أحد أهدافها الأساسية البحث عن فرص للتعاون بين فعاليات تكمل بعضها البعض في كل من دول مجلس التعاون الخليجية والصين والهند في حقل الاستدامة.

2. مبادرة الاستدامة في التوسع العمراني والتمدن:

قد يكون أحد أهداف هذه المبادرة الأساسية وضع خريطة طريق لبحث وتطوير ابتكارات تسهم في حلول جذرية وليس جزئية لمتطلبات المدينة المستدامة. ونتائج هذه المبادرة يجب أن تكون أدوات عملية تسهم في تطوير منتجات وخدمات جديدة. جانب آخر من هذه المبادرة يمكن أن يكون في التركيز على الدور الذي يمكن أن تلعبه الشركات والحكومات الأجنبية في دعم ابتكارات في المنطقة العربية تركز على كفاءة المصادر.

3. استثمارات استراتيجية للابتكار:

من أهداف هذه المبادرة تطوير استراتيجية لتوجيه استثمارات دول مجلس التعاون الخليجي بحيث تسهم في تحقيق الاستدامة عالميا. وقد يتم تفعيل هذه المبادرة من خلال مجموعة من المشاريع الاستثمارية الاستراتيجية تطلقها دول مجلس التعاون بالاشتراك مع استثمارات استراتيجية أجنبية وخلق أسواق جديدة ذات بعد دولي.

INTRODUCTION

Midway through the first decade of the 21st century, the world is rapidly approaching a situation where, for the first time in human history, more people will live in cities than rural areas.²⁰ Exactly when this point will be reached is unclear, but it is estimated that humanity is likely to cross this historic threshold sometime during 2008.²¹

Over the coming decades, virtually all of the population growth in the world will take place in urban environments, resulting in a situation where approximately two billion additional people will live in cities by 2030.²² As a result, the demand for investment in urban solutions that can improve quality of life without consuming excessive natural resources will increase over time.

Parallel to this trend, global energy use is increasing rapidly, with demand expected to increase by more than 50 percent by 2030 if current trends continue.²³ With China being the world's second largest consumer of energy, India the sixth and the Asia-Pacific region predicted to consume more than one-third of the world's energy by 2020,²⁴ political and business leaders realise the importance of cooperation, support and new strategic alliances in the field of energy and beyond.²⁵

“Total bilateral trade between China and Arab states went up from \$2.42bn in 1991 to \$36.71bn in 2004, increasing by 14 times within 14 years. By the end of 2004, China's total investment in Arab States amounted to about \$500m.”
The Middle East, June 2005²⁶

During 2005, China became the world's fourth largest economy in GDP terms, from sixth the previous year, in the process surpassing both Italy and the United Kingdom.^{27/28} It is predicted that China could become the world's largest economy by 2039, earlier than previously predicted.²⁹ Measured in purchasing power parity (PPP) terms, China is already the world's second largest economy.³⁰

Another rapidly booming economy is that of India, which in 30 years is predicted to be the world's third largest economy, behind the US and China.⁵ Needless to say, the relations between these two emerging economic powerhouses, both of which have historically exerted tremendous influence in the Asian region, will have a huge impact upon the development path of the world, including the Gulf states.

“India’s crude oil imports are worth about \$50 billion currently and two thirds are imported from the GCC. Non-oil trade between India and the GCC is worth nearly \$20 billion.”

Gulf News, March 2006 ³²

Much evidence exists to indicate that the links between the emerging economies and the Middle East will grow stronger over the coming decade. At the end of 2005 the President of OPEC, Sheikh Ahmed Fahed al-Sabah, made his first official trip to China.³³ At the same time as China is looking to secure future oil supplies, OPEC has exhibited a keen interest in closer ties with the world’s second largest oil consumer.³⁴

In terms of energy, China’s demand for oil is expected to double in the next 20 years. New vehicle sales in China rose by 82 percent in the first half of 2003 compared to the same period in 2002.³⁵ China now has the world’s second largest automotive market with almost six million vehicles sold in 2005.³⁶ Also in 2005, more than half of the world’s increase in energy consumption occurred in China.³⁷ In the same year, 58 percent of China’s oil imports came from the Middle East, and by 2015 this figure is expected to reach 70 percent.³⁸ A free trade agreement is expected to be concluded between China and the GCC countries in 2007.³⁹

“It is only a matter of time before China becomes closely involved in the Middle East, whose oil reserves it increasingly covets... China – this time around – will become a leading force in a competitive and interdependent world. As such, China may rewrite some of the same rules that other countries now expect it to abide by – whether on property rights or on international trade – challenging nations, firms and individuals to adjust their business models and expectations. The massive movement of production factors that China is triggering may not only turn our economic theories and political assumptions on their head, but will also test fundamental threads in our society. How the coming Challenge is handled will define much of the world our children will inherit.”

Oded Shenkar, *The Chinese Century* ⁴⁰

The importance of China and India is increasingly being acknowledged by the Arab world in a number of ways. Regional construction firms are venturing into these economies and one UAE developer, DAMAC Properties, is embarking upon its single largest venture in China, involving a \$2.7 billion residential and commercial cluster in the Tanggu District, overlooking Tianjin Port. At the same time, a joint venture led by DP World,⁴¹ another UAE-based conglomerate, will invest \$670 million in the development of Tianjin harbour.⁴² A third venture is planning to invest \$4 billion in building townships, hotels and hospitals in India, with this development expected to generate twice that amount in revenues.⁴³ Acknowledging this changing geopolitical situation, the effects of dramatic demographic changes and the global use of natural resources are crucial in analysing future options for Arab companies.

In this report, the opportunities for Arab companies to play a positive role in a changing international setting are explored. In contrast to the common trend of highlighting the problems which exist in such a setting, WWF is intent on engaging in discussions focusing on the opportunities which exist in this regard.

This report explores the possibilities for three distinct phenomena to be linked together in a manner which allows the UAE to provide global leadership in sustainable development. The first of these phenomena is the rapid urbanisation that is taking place, especially in emerging economies, and the possibility to use this trend as a catalyst for the development and implementation of resource-efficient solutions. The second concerns the emerging economies, in which the majority of new investment in infrastructure will take place and from which new standards will emerge in areas such as construction and city planning. Finally, the report investigates the possibility of utilising the oil revenues being generated by the GCC countries and other oil producers for strategic investment in order to diversify their economies and develop innovative solutions that provide welfare increases in a sustainable manner.

The report is divided into six chapters. The first provides a short historic background of the region and introduces the current economy. The second chapter focuses on means by which the current challenges facing the region can be turned into opportunities, while the third presents the results of the survey of leading UAE companies undertaken from a company perspective. The fourth chapter provides recommendations for various stakeholders, based upon the results of the study. Chapter five presents further suggestions regarding possible mechanisms for the implementation of corporate leadership projects. The final chapter outlines three initiatives that could support a global GCC leadership in the provision of sustainable urban solutions.

The coordinator of this initiative is Dennis Pamlin of WWF and the project leader in the UAE is Suzanne Pählman. The report was authored by Tareq Emtairah, Suzanne Pählman and Dennis Pamlin. It was edited and proof read by Alistair Schorn. Valuable input and support were provided by Razan Al Mubarak, Jennifer Morgan, Gary Kendall, Tom Crompton, Lars Kristoferson and Alistair Schorn of WWF. Assistance in conducting the survey was received from Dr Ayoub Kazim, Khaled Lootah, Ahmed Dorghamy, Yahya Al Ansari, Zeyad Al Majed, Sherif Abaza, Ayman Monged, Ziad Tassabehji, the Young Arab Leaders and the Emirates Environmental Group. For the compilation of the top 100 companies list, valuable assistance at the Abu Dhabi Chamber of Commerce and Industry was provided by Mohammed Al Naemi and at the Dubai Chamber of Commerce by John Thomas. The calligraphy for the cover was provided by Nasser Al Abedin and the executive summary was translated to Arabic by Ola Emtairah.

1.

THE ARAB WORLD IN THE GLOBAL ECONOMY

“Arab sailors were the means by which inventions and thoughts were transported from the Far East to Europe, causing the Greek and Roman Empires to develop into great and sophisticated civilizations.”

nabataea.net, 2002⁴⁴

“The Arabs were among the first ambassadors of the realm of ideas [...] it was Arabs who transferred Indian science, medicine, literature and, above all, mathematics to western Europe.”

The Globalist, October 2006⁴⁵

While most cultures have at various times in their history perceived themselves as the centre of the world, few can rightfully claim that title to the extent that the Arab world can. Geographically and culturally, it is a bridge between East and West, North and South. Historically it has influenced, and been influenced by all major cultures, as caravans and sailors have passed along its major trade routes.

As far back as the sixth millennium BC, there existed a large trading network connecting many distinct cultures in the Middle East.⁴⁶ The region also profited from international influences, thanks to its strategic position in the trading network which developed within the Mediterranean, Red Sea and Arabian Gulf between the second and first millennium BC.⁴⁷

Historically, the Arabs were nomadic desert warriors, who enjoyed their principal era of conquests around 600AD, as they seized the ancient regions of Mesopotamia and Egypt, in the process defeating the Byzantine and Persian empires.⁴⁸

“The period of Arab dominance in the Middle East was relatively short, at most 250 years. But in that time the entire region became comprehensively Arabized. Arabic became the language of state, the idiom of culture, and the voice of Islam.”

David Fromkin, *Cradle and Crucible – history and faith in the Middle East*⁴⁹

The Arab League or League of Arab States* is today the constellation that is most commonly referred to as the “Arab World”. Its 22 members are: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the UAE and Yemen.

1.1 Developments in the Arabian Peninsula

Between the waters of the Arabian Gulf and the Red Sea lies the vast and sparsely populated desert of the Arabian Peninsula. Perhaps the most precious commodity in the known world 4,000 years ago, frankincense was transported across the peninsula through a complex trade network, with camels transporting the resins from remote valleys.⁵¹ This trade made the “Incense Road” of the Arabian Peninsula as important to the Middle East as the Silk Route to the East.⁵² Possibly commencing as early as 1800 BC, the Arabian middlemen developed the secret route which constantly changed to avoid taxation of the caravans.⁵³ For 1,500 years or more, this trade supported a succession of civilisations in the peninsula, as heavily regulated tolls and customs dues were collected from travellers.⁵⁴

“...well-worn trails twisted up the Eastern side of the peninsula for caravans laden not only with frankincense, but also with silks, spices, gold, precious stones, ivory, rare woods, and other merchandise that had been brought from Africa, India, and even China by the Arab merchant fleets.”

Andrew Taylor, *Travelling the sands – sagas of exploration in the Arabian Peninsula*⁵⁵

From ancient times, the trading cities in the Gulf were linked to India through its waterways. Later, during the Middle Ages, Arab sailors ventured to China and beyond in order to trade.⁵⁷ More recently, during the past 400 years, Arab sailors would sail through the Indian Ocean and around Southeast Asia, where they encountered European powers.⁵⁸

“The [Arabian] gulf has been an important waterway since ancient times, bringing the people who live on its shores into early contact with other civilizations.”

William Smyth, US Library of Congress’ country study on United Arab Emirates⁵⁹

*The League was formed in 1945 and “Economic, social and cultural activities constitute principal and vital elements of joint action in addition to the fact that they provide solid grounds for development, security, liberation and economic integration.”

As ships could begin travelling with more confidence, less afraid of piracy, the importance of the waterways grew whilst the importance of the desert trails diminished. Traders began to bypass the middlemen of the Arabian Peninsula and by the late sixth century, these ancient desert trade routes had been all but abandoned.⁶⁰ In the period that followed, developments in the Peninsula were dominated by religious influences and local Arab tribes.⁶¹

From the 19th century, Western interest in the region again began to increase,⁶² with the 20th century largely dominated by British influence.⁶³

Before the discovery of oil, the principal exports from the region were hides, wool, coffee, spices, camels and Arabian horses. In the western part of the Peninsula, pearling was a significant export industry. Agriculture remained the principal occupation and for this reason the population was chiefly concentrated around oases.⁶⁴

1.2 Black Gold

“In the twentieth century, the discovery of massive oil deposits in the gulf made the area once again a crossroads for the modern world.”

William Smyth, US Library of Congress’ country study on United Arab Emirates⁶⁵

By the mid-1900s, the Arabian Peninsula had become largely insignificant as a centre for trade, but a new era was about to dawn for the region. The development of highly industrialised economies in Western Europe and the USA led to the emergence of an international economic system which had fossil fuels at the core of industry and transport. The “black gold” of oil therefore became the “black blood” that provided life to the modern world economy.

“The first shipment of oil from the Middle East was made by APOC in 1912 from Abadan, on the Shatt al-Arab, still a major oil center. Further development was limited until World War I, when events proved the superiority of fuel oil over coal for firing boilers on naval vessels and commercial steamers. The demand for oil spiraled upward and has never ceased.”

Colbert C. Held, *Riches beneath the earth*⁶⁶

As the Ottoman Empire, which included the Arabian Peninsula, faced defeat in World War I, the British, French, Dutch and American interests in the region led to a series of attempted agreements and treaties to secure oil concessions.⁶⁷ In 1928, the so-called “Red Line Agreement” was signed, prohibiting

the stakeholders from independently seeking oil interests in the territory of the Arabian Peninsula (with the exception of Kuwait, which was designated a British reserve). The Americans, however, negotiated an increasing number of oil concessions under different company names within the “Red Line” area, finally causing the cartel to collapse. As a result, the agreement was scrapped in 1948.⁶⁸

The modern transformation of the Arabian Gulf region began in 1932 with the discovery of oil in Bahrain. However, production did not start in Bahrain, Kuwait and Qatar until after World War II.⁶⁹ The first major commercial discovery in Saudi Arabia was made in 1938 and since then discoveries there have included both the world’s largest oilfield and largest offshore oilfield.⁷⁰ In 1958 oil was discovered in Abu Dhabi.⁷¹

“Contrary to what many people think, however, the early days of the oil industry were only marginally better than the decades of poverty which had preceded them. [...] The oil companies discouraged the locals from participating in any way other than as hired hands. The people who worked for the oil companies during the 1950s and early 1960s look back with bitterness rather than fondness of those early days. Many have since become prominent citizens; some are ministers or ambassadors, others are highly qualified people in their respective professions. The painful memories of their exploitation, however, linger on even today.”

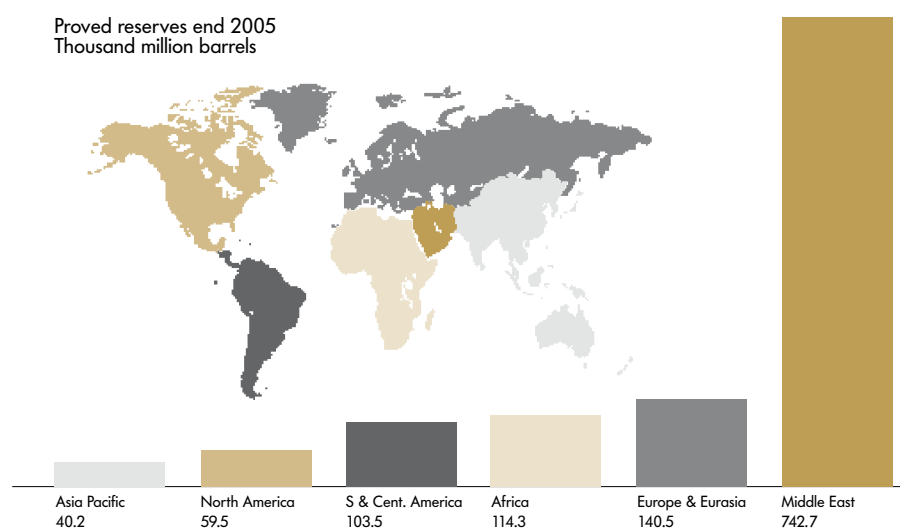
Mohammed Al-Fahim, *From Rags to Riches – a story of Abu Dhabi*⁷²

Despite the fact that the original inhabitants of the region were excluded from the early stages of exploration and development of the oil industry, the fact of the matter is that oil revenues in the Arab Gulf states have led to the creation of welfare states where citizens rely on the state and the services it provides in virtually all spheres of life.⁷³



For the GCC countries, export of oil (1) has created export income (2) and surpluses have been spent to create welfare (3)

The geopolitical significance of the Arab world and its oil resources became dramatically apparent to the entire world in October 1973, as the OPEC⁷⁴ countries imposed an oil embargo on the United States and its allies, causing oil prices to treble within the space of three months and resulting in major economic recessions in the US and other industrialised countries, despite the fact that the embargo lasted only six months.⁷⁵ The embargo was triggered by Western support for Israel during the Arab-Israeli War of 1972, and was implemented against the United States, Netherlands, Portugal, South Africa and Rhodesia.⁷⁶ Since these events, analysts have on a regular basis raised the question of whether a repeat of this situation is possible.⁷⁷ While the answer to this question is unclear, recent events, such as the 2003 American invasion of Iraq, reinforce the fact that the strategic relevance of the region and its oil reserves has not decreased.



Source: BP Statistical Review of World Energy 2006

The Arab world holds more than half of the world's proven conventional oil reserves (57 percent), in addition to almost half of the proven natural gas reserves (45 percent).⁷⁸ Saudi Arabia possesses the world's largest proven reserves and alone accounts for one-third of OPEC's total output⁷⁹. It is important to note, however, that the lack of transparency regarding oil reserves within the region make it difficult to ascertain precisely what level of reserves remain, and consequently what percentage of these reserves are exported annually.

”So, the five big Middle Eastern countries do hold around half the world’s remaining oil, of that we can be pretty sure. But how much there really is of it, how much everyone else has and how long it is going to last, may be anybody’s guess.”
Al Jazeera, November 2004⁸⁰

The primary source of global oil market data is the International Energy Agency (IEA), which produces world energy statistics under the legislative authority of the Agreement on an International Energy Program. This agreement, however, only includes the 26 OECD countries and the largest oil-exporting countries are therefore excluded, meaning that those countries which account for almost three-quarters of the world oil supply have no obligations to provide the IEA with data.⁸¹ As a result, no definitive statistics regarding oil production are available.⁸² With the world’s oil demand growing, the uncertainty around precise oil reserves and supply levels has led to the evolution of an international oil trading system in which periods of oversupply and stockpiling by major oil consuming nations lead to decline in the oil price, which in turn trigger decline in production aimed at inducing shortages and driving prices upward. Within this system, the only certainty remains the fact that the supply of the resource is finite.⁸³

“Whether the future of oil is threatened or assured, the wise course of action is to prepare for a day when revenues may not be sufficient to maintain living standards. If oil turns out to be under threat, the development of a non-oil economy will provide a safety net. If the optimists turn out to be correct in their view that oil will continue to have a future for a very long time, the development of a non-oil economy will add to the wealth of countries. Nothing will be lost in either case.”
Robert Mabro, *The future of oil as a source of energy*⁸⁴

2. ARAB COMPANIES IN A CHANGING WORLD

“While extinction is a natural process, human impacts have elevated the rate of extinction by at least a thousand, possibly several thousand, times the natural rate. Mass extinctions of this magnitude have only occurred five times in the history of our planet; the last brought the end of the dinosaur age.”

Conservation International, 2006 ⁸⁵

“As we are facing challenges today and in the future with an even higher level of complexity than before due to the course in which our societies have evolved, tomorrow’s leaders need to do more than simply follow in the footsteps of leaders in the past.”

Warren Bennis, *Leadership and management in the information age* ⁸⁶

It is undeniable that the pace of change in the world is accelerating and in the coming decades, society is set to experience profound transformations. This chapter examines some of the major challenges facing the world in the near future, and the manner in which these changes will affect the Arab world as a whole, and the oil producing countries in particular. It then goes on to review some of the ideas and theories aimed at turning these challenges into opportunities, and finally provides an overview of the rapid urbanisation occurring in the region, and some of the most important opportunities that this trend provides.

2.1 Global challenges – a regional context

Various studies have pointed out that the early 21st century is a period in which many of the assumptions held by society are being rigorously challenged. The global population is increasing rapidly, with an expected growth of 50 percent, from six to nine billion by 2050.⁸⁷ The earth has of course never been required to sustain this population level, and consequently a point has been reached where natural resources are being consumed at a rate far in excess of the earth's capacity to sustain such consumption or replenish these resources.⁸⁸

At the same time, society faces the challenges of addressing the basic needs of, and providing some degree of welfare improvement for, that portion of the world's population living in poverty. In order to ensure that these welfare improvements occur and an acceptable quality of life is provided to all members of society without destroying the future of the planet in the process, there exists an urgent requirement for both innovative solutions and for individuals or institutions to take the lead in implementing such solutions.

“Obviously, a demographic change of this magnitude will require a major reorientation of human thought, values, expectations, and lifestyles.”

J. Kenneth Smail, *Global Population Reduction: Confronting the Inevitable*⁸⁹

As mentioned, by 2008 half of the world's population is predicted to be living in cities, marking the first time in history that the urban population exceeds the rural one.⁹⁰ Exacerbating this situation is the fact that approximately two billion additional people will be added to the urban population by 2030,⁹¹ and that global energy demand is set to double within the same period.⁹² As a result of the pressure placed upon the planet's resources by this growth in population and energy demand, it is estimated that 30-35 percent of the world's population will face severe fresh water shortages.⁹³ In fact, environmental degradation is now widely recognised as a potential underlying factor for global political instability.⁹⁴ Effective solutions are therefore pivotal to ensuring peace and avoiding conflicts over natural resources. It is important to note that challenges such as urbanisation, demographic changes, geopolitical changes and natural resource constraints are converging, thereby creating even greater pressure for innovation than each of the challenges by itself.



Global challenges are effectively challenging the hitherto existing model of development in oil producing Arab countries. A number of converging global tendencies and projections are set to challenge the position of oil as an important provider of export revenues, in the way it is today (box 1). Other converging global challenges are set to impact the manner in which welfare must, can and will be provided in the future (box 2).

The issue of Climate Change is one example of a driver for change. Climate Change has gained prominence in the political agenda of many countries and is increasingly being viewed as one of the major challenges for the international community. UK Prime Minister Tony Blair made Climate Change a key area of focus during his country's leadership of both the G8 and the EU presidency in 2005.⁹⁵ In the same year, former US President Bill Clinton launched his "Global Initiative" with a focus on Climate Change,⁹⁶ while in China the urgency of the requirement for a more sustainable energy system has prompted several increases in renewable energy targets.⁹⁷ Even smaller countries are taking concrete action; for example, Sweden has set a target of oil independence by 2020.⁹⁸

In today's global economy we have a consumption of natural resources at an unprecedented rate. Although the implementation of new technologies has delivered efficiency improvements in many areas, increasing demand has more than compensated for those gains.⁹⁹ The world's stocks of minerals, water, forests, food crops and fish are all being consumed in ever-increasing volumes, resulting in the exploitation of natural resources in sensitive areas and collapse of ecosystems worldwide.¹⁰⁰

In many countries, both developed and developing, the reduction of oil dependence is a major priority. A number of converging challenges are responsible for this imperative, as described in Box 1 of the illustration above, and as a result these countries are under increasing pressure to invest in technologies which will lead to reductions in their oil dependence.

In terms of oil supply, it is believed that OPEC as a whole is producing oil at a rate very close to its maximum capacity, raising the question of how increasing future demand is to be met.¹⁰¹

"Technology breakthroughs are the key [...] The cost of developing entirely new energy supplies is daunting, but the money is available [...] There's no telling where the next game-changing energy resource will come from. But motivating tens of thousands of scientists and engineers to look for it increases the odds of finding the path to a happier, maybe even cleaner, planet."

Wired Magazine, December 2005¹⁰²

The requirement to review the role of oil in their economies, and to investigate alternative means to provide welfare to their populations, is becoming an increasingly important priority for all countries.

“Recently, the environmental concerns of most of the developed countries have led them to desperately seek a sustainable and reliable environmentally-friendly energy alternative. Developing countries will need to take the same path and I believe that the United Arab Emirates, with the highest carbon emission per capita in the world, can play a key role in utilizing and supplying the world with clean energy, such as hydrogen and solar. We have a huge opportunity and potential to achieve a lower environmental pollution and maintain the country’s high economic growth rate as suppliers for a global clean energy demand and energy efficient solutions.”

Dr. Ayoub Kazim, Executive Director of Dubai Academic City*

“The way that this oil bonanza is spent will help shape future economic growth, not only in the Gulf but also in the region as a whole.”

Gulf News, December 2005 ¹⁰³

2.2 Sustainability as an innovation driver

“If your company is going to be a global leader, you have to understand what’s going on in the rest of the world”

Richard Lapman, Senior vice president for research at Hewlett Packard quoted in New York Times, February 2006 ¹⁰⁴



In the current situation of high oil prices, the oil export (1) generates a significant income surplus (2). This creates the possibility of exploring investments (3) that can deliver new sustainable goods and services (4) particularly those that possess export potential (5). If managed in a strategic fashion, these investments can contribute to a new cycle of sustainable export (6) and sustainable export income (7) based upon the requirements of the world market.

A study of major trends in the global arena, including rapid urbanisation, demographic changes, geopolitical changes and increased consumption of natural resources, reveals the imperative to explore new and innovative solutions that provide increased levels of welfare with minimal consumption of natural resources. Achieving this objective calls for approaches that look beyond incremental changes and attempt to turn the challenges which currently present themselves into opportunities for transformation.

*Interview with Suzanne Pålman, April 5, 2006.

There exists a consensus, both among academics and politicians, regarding a number of these global challenges, such as the lack of sufficient natural resources to address the welfare demands of a rapidly increasing population, as well as the fact that these challenges are not effectively translated into clear market signals that will galvanise both producers and consumers into implementing the corrective steps required.

There also exists consensus regarding the fact that, for many of the challenges, solutions are already available, but the incentives required for their implementation are not in place. In fact, in certain instances, innovative sustainable solutions do not imply higher costs, but are faced with a situation in which the current institutional structures and decision-making processes do not support their implementation.

There exists a finite window of opportunity for the implementation of such innovative solutions, to shape the path of development in regions where they are most urgently required, such as China and India which are already constrained by a scarcity of resources. Over the next 20 years this window of opportunity will gradually shrink and will eventually close. Once the window is closed we will have an infrastructure depending on large amounts of natural resources. The result will be conflicts over natural resources or collapse of major ecosystems, probably a combination of both, something we already see the beginning of.

Each passing day therefore represents a lost opportunity, and in order to enable Arab companies to play a leading role in providing appropriate solutions to the global market, it is imperative that sustainability strategies are developed and implemented as soon as possible.

“The current paradigm of rapid economic growth along with the need of conserving the natural and ecological resources, challenges the very foundation of the manner in which business is done today. It challenges the traditional business management theory, which echoes Milton Friedman’s famous statement that there is ‘only one responsibility of business: to use its resources and engage in activities designed to increase its profits.’

The fact that rapid economic growth is the only realistic means to lift the poor out of extreme poverty and the fact that most economic activities depend on products and services provided by the ecosystems, necessitates the ushering of a new business paradigm which enables rapid economic growth without compromising the capacity of the ecosystem to sustain, nurture and fuel economic development and human well-being.”

CII-ITC Centre of excellence for sustainable development, 2006 ¹⁰⁵

Furthermore, in order to support innovation on the scale required, it is essential that a road map for the development of sustainable products and services is implemented. This road map should build upon already existing initiatives aimed at providing concrete solutions to a limited number of challenges, which can then be exported to the world market.¹⁰⁶

“If you have money, you can get your factories built, as well as highways, offices, desks, but if the people within your society are not geared to working in an organised and systemised business environment, you haven’t achieved anything.”

Dr Thuraya Al Arrayed, Planning advisor and consultant to Saudi Aramco, quoted in Invest Dubai, Summer 2006 edition ¹⁰⁷

The general consensus regarding the global economy is that the requirement exists to move towards knowledge and service-based societies,¹⁰⁸ in which innovation is considered to be the key to a country’s economic development.

“Innovation is playing a pivotal role in creating higher quality jobs, businesses that are more successful, better consumer services and more environment-friendly operations.”

Extract from the speech held by HE Maqbool bin Ali Sultan at the World Summit on Innovation and Entrepreneurship in Muscat, April 2006 ¹⁰⁹

“What innovation is there really? We in Dubai have done a basic cut-and-paste job with very few exceptions. What was the last innovation you heard of from the Arab world?”

Mishal Hamed Kanoo, deputy Chairman of the Kanoo group quoted in Invest Dubai, Summer 2006 edition ¹¹⁰

In 2006, for the first time, the United Nations organised a World Summit on Innovation and Entrepreneurship. Not only was it hosted in the Gulf region, in Oman, but the links between economic performance and a knowledge-based economy were highlighted in the host address and widely discussed at the conference.¹¹¹ This provided the opportunity for discussions regarding sustainability as a driver for innovation and the potential for the Arab states to play a leading role in this regard.

“We have a lot of tacit knowledge in the Arab world, so how do we access it and turn it into a competitive advantage, growth, and profit? We need to think of knowledge as raw material, like oil. The intellectual capital is our fuel into tomorrow’s knowledge economy, but what will be our vehicles? There is a lack of a holistic perspective to capture our enormous intellectual resources and reserves to become truly competitive and innovative global players. We need to think of innovation, entrepreneurship, and research and technology as for profit semi-industries that require developing macro and micro policies and strategies.”

Abdulla Subyani, Founder and President of the Gulf Venture Capital Association Founder of the Arabian Knowledge Economy Association*

Translating the theoretical benefits of innovation into practice, however, will require a great deal of focus upon the situation in which the majority of the Arab states currently find themselves. For example, the rapid urbanisation occurring in the UAE can be utilised as a driver for the development of innovative solutions. The next section will examine this phenomenon and the opportunities which it provides.

2.3 Urbanisation

“The GCC’s economic situation is unique; no other region in the world has such a small population in possession of such large hydrocarbon reserves, a population that relies so heavily on non-national labor. Revenues derived from hydrocarbons have enabled the GCC to build a first class infrastructure, which provides an ideal base for both energy and non-energy related economic activities. To varying degrees all GCC nations are seeking to reduce their economic dependence away from oil and gas, having economic policies that create a climate conducive of attracting a greater range of businesses is seen as an imperative.”

Gulf Research Center ¹¹²



The investment in urbanisation (construction, including ICT and energy) (1) can result in innovative solutions (2) that can be bundled as urban solutions (3) and result in export (4) and export income (5) that can in turn be reinvested both in domestic and international urban solutions (6).

*Interview with Suzanne Pählman, April 2, 2006.

The sharp increases in oil prices over the past two years have enabled the GCC economies to develop a number of new economic sectors such as construction, tourism and finance.¹¹³ This diversification away from an oil-based economy has become a major trend in the region, despite the fact that many of the largest companies (most still under government control) are oil and gas companies.¹¹⁴

Overall the Gulf remains an extremely sparsely populated region, but presently more than half of the population of the Gulf states is urban, and this figure is increasing every year.¹¹⁵ In Qatar, for example, it is predicted that 90 percent of the population will be living in the capital, Doha, by 2020.¹¹⁶

”Cranes fill the hot sky. Skeletal hotels, resorts and financial centers ring Doha Bay. And from every corner, a symphony of earth-moving equipment and power tools hums the theme of one of the world’s richest countries (as measured by gross domestic product per capita) striving to become a world-class business and leisure center.”
New York Times, June 2006 ¹¹⁷

This report seeks to highlight four sectors which are of specific importance if the region is to successfully implement sustainable solutions in its rapidly expanding cities. These sectors are construction, energy, ICT and finance.

CASE ONE: CONSTRUCTION “Construction activity is currently running at its highest level for almost two decades and shows no sign of slowing down.”
ITP Construction, May 2006 ¹¹⁸

“High oil prices have boosted public and private sector confidence region-wide and one of the results has been increased spending on property development and other construction activity, creating a very buoyant and prosperous economic environment”
The Middle East, June 2005 ¹¹⁹



Investments into the construction sector (1) can generate new goods and services (2) that form part of sustainable urban solutions (3). These can be used to generate a new export base of construction solutions that provide sustainable exports and export income (4 & 5).

As part of a diversification process, much of the oil revenue has been channelled into real estate development, resulting in a major construction boom in the past several years.¹²⁰ Currently there are over 1800 construction projects taking place in the GCC.¹²¹ Throughout the region, exotically shaped man-made islands are rising from the sea; palm trees and a map of the world in Dubai,¹²² a seahorse in Bahrain¹²³ and “The Pearl” in Qatar.¹²⁴ Furthermore, the world’s tallest building is being erected in Dubai.¹²⁵

In 2005, the value of construction projects in Bahrain, either announced or in progress, amounted to more than US\$ 10.7 billion.¹²⁶ Even more impressive are the figures for the Emirate of Dubai in the UAE, with over US\$ 100 billion worth of development projects either under implementation or in the process of planning and approval,¹²⁷ and Kuwait, with a massive US\$ 200 billion.¹²⁸ The publicly listed Emaar Properties in the UAE has single-handedly increased the share of real estate companies from 4 percent to almost 9 percent of the top 100 listed companies in the Arab world.¹²⁹

Some observers suggest that the enormous investments in the sector seem to have sparked a competition within the region for landmark “prestige” construction projects to attract tourists and enhance extravagant skylines.¹³⁰ At the same time, however, this construction boom provides the potential for the implementation of sustainable solutions on a massive scale. A telling example in this regard can be found in the new Bahrain World Trade Centre in the country’s capital, Manama.

This landmark project is designed as an “intelligent building” which will harness 10-15 percent of the building’s annual energy requirements from wind power. Two 50 storey towers are connected by three horizontal axis wind turbines, each 29 metres in diameter. “The towers and turbines were inspired by traditional Arabian wind towers which harness the wind energy from the onshore breeze,” said one of the architects.¹³¹ Another element of intelligent design into the building is that of district cooling¹³² to reduce overall energy consumption.

The first platinum-rated Leadership in Energy and Environmental Design (LEED) certified green building¹³³ in the Middle East is being constructed in the free zone of Dubai Techno Park in the UAE.¹³⁴ The building design includes solar energy for lighting and air-conditioning systems.¹³⁵ This development was followed by the announcement that the entire new free zone of the Dubai Biotechnology and Research Park will be constructed in compliance with global environmental benchmarks. Once certified, the Headquarters of the Park will be one of the largest green buildings in the world.¹³⁶

In addition to these examples, it would appear that the concept of sustainable building design is becoming more widespread in the region. For example, what is considered to be the world’s largest single phase residential

and commercial development is currently under construction in Dubai. This complex is expected to house 25,000 inhabitants,¹³⁷ and the developer is actively promoting “green building” design, with the project including energy efficient measures such as water management and district cooling systems.¹³⁸

CASE TWO: ENERGY “The world uses some 320 billion kilowatt-hours of energy a day. It’s equal to about 22 bulbs burning nonstop for every person on the planet. No wonder the sparkle is seen from space.”
National Geographic, August 2005¹³⁹

“I would not be surprised if you would see some spearheading renewable energy projects springing from the Middle East that will gain international acclaim and importance. Both the capital and will is here as well as a recognition that we need to act now, before it might be too late, to come to terms with our growing global energy crisis.”
Yahya Lootah, S. S. Lootah international*



Investments in energy solutions (1) can support the development of sustainable energy services (2). Energy is a key part of urban solutions (3) and the global demand is increasing. With the right strategies in place, these energy solutions can be exported (4) and provide export income (5).

As global energy demand is predicted to increase by over 50 percent in the next 25 years, the continuation of current energy generation and consumption patterns will result in an increased reliance on the oil supplies of the Gulf region.¹⁴⁰ As discussed, this reliance is neither sustainable nor environmentally responsible. Fortunately, however, a number of governments and companies in the region are investigating new sustainable scenarios.

In the Emirate of Abu Dhabi, the Abu Dhabi Future Energy Company has been established to manage a significant renewable and alternative energy initiative, Masdar.¹⁴¹ The initiative aspires to diversify Abu Dhabi’s economy and ensure its economic future in a “post-fossil fuel era”. The project includes an Academic and Research Institute, a Special Economic Zone with both business and residential developments, an Innovation Centre and a Clean Development company.¹⁴² The Company has also launched the US\$ 250 million Masdar Clean Tech Fund which will invest in promising companies engaged

*E-mail exchange with Suzanne Pählman, September 9, 2006.

in the development of advanced energy and sustainability-related technologies.¹⁴³

Another capital-intensive research initiative is the Qatar Foundations Science and Technology Park which, although not specifically directed at the energy sector, will host incubators for the commercialisation of research, with the aim of “driving Qatar and the region toward a diversified, knowledge-based economy”.¹⁴⁴ Also built by the Qatar Foundation is Education City, which will host joint research to attempt to capture a portion of the renewable energy and sustainable development market.¹⁴⁵

CASE THREE: “We’re living in a world where Skype has the same value as Siebel Systems and there is no way to do business as usual.”
ICT Tom Steward, editor Harvard business review, quoted in Network Middle East, March 2006¹⁴⁶

One of the areas in which rapid developments have been most obvious in the Arab world, is the Information and Communication Technology sector (IT/ICT). In the Global Information Technology Report published by the World Economic Forum (WEF), which investigates national ICT progress, four of the six GCC member states rank amongst the top 50 countries in the world, with the UAE claiming the highest ranking of 28th.¹⁴⁷

Across the Arab world, the telecommunications sector is booming and is predicted to continue doing so for a considerable length of time. The fifth-largest listed company listed in the UAE is an ICT company, Etisalat.¹⁴⁸ While some of the Gulf countries are close to reaching a “saturation point” in terms of network coverage and expansion of subscriptions, the expansion in terms of the provision of new services have hardly begun.¹⁴⁹ For example, a Memorandum of Understanding has been signed between Etisalat and Samsung to test and implement an advanced system of wireless telecommunications in order to develop smart future cities in the UAE.¹⁵⁰ Another system with “smart” home solutions is also available, allowing users to program and control various appliances and services within their homes.¹⁵¹

From an international perspective, such innovative technologies and services could play an important role in sustainable development across the world, by reducing energy consumption and decreasing pollution.

WWF has produced a number of reports outlining the opportunities for ICT to reduce resource use and contribute to sustainability and has a webpage dedicated to the subject, www.panda.org/ict.



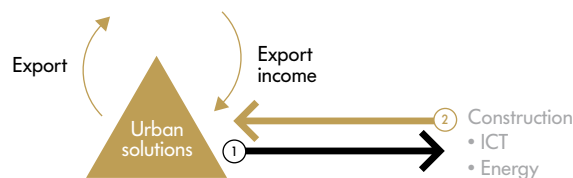
Investments in ICT (1) can create new innovative solutions (2) that are necessary for intelligent urban solutions (3). These solutions can be exported (4) and generate export income (5).

Throughout the region, telecom operators have historically been state-owned and have therefore enjoyed monopoly status in their respective markets. However, this situation is being increasingly done away with, as countries liberalise this previously restricted sector.¹⁵² Governments are also spearheading developments in e-governance such as ictQATAR, which promotes the delivery of e-services¹⁵³ and the e-government portal in the UAE, which promotes the implementation of online services such as payments and applications¹⁵⁴. The Dubai Municipality is expected to have 90 percent of its services online by the third quarter of 2006¹⁵⁵. Such online services will of course have the effect of reducing natural resource consumption, for example through the reduction of travel.

“Our current e-services infrastructure has served us very well, but we need to drive forwards and continue to build innovation and efficiencies into our model.” Abdullah Al Shaibani, Dubai Municipality’s assistant director general for technical services quoted in Gulf News, September 2005¹⁵⁶

CASE FOUR: “OPEC net oil export revenues in real (inflation adjusted) terms are currently running nearly triple the average annual revenues seen during the 1990s”
FINANCE Energy Information Administration, January 2006¹⁵⁷

“What’s happening to the estimated \$400 billion current account surplus harvested this year by oil exporters?”
Washington Post, December 2005¹⁵⁸



Without investment (1) the potential of new export products and sustainable urban solutions cannot develop. Support from the financial sector is therefore required if sustainable urban solutions for export (2) are to materialise.

The Arab world is changing rapidly and high oil prices are accelerating this change. A likely response to the question posed in the quote from Washington Post above, therefore, is that a large portion of the oil revenues are being invested in the Gulf countries themselves. It is, however, important to note that approximately 70 percent of the funds generated by the oil boom in 2005 could not be traced through conventional measures.¹⁵⁹

“The market capitalization of the GCC market, which was around US\$ 120bn in 2000, has catapulted to reach US\$ 1,136.6bn in 2005. This represents a growth of 844.2% within a period of five years.”

Global Investment House, March 2006¹⁶⁰

The infrastructure sector and the local stock markets are booming, with the valuation of the top 100 listed Arab companies more than doubling from 2004 to 2005.^{161 162}

The existence of significant liquidity and the lack of a long-term strategy have impacted on the volatility of the stock market both within the UAE and beyond.¹⁶³ Sustainability criteria for listed companies have to date never been investigated or even considered. In this regard, the rapid growth of the Islamic banking sector could provide an opportunity to introduce new sustainability criteria into the region’s economic consciousness.¹⁶⁴ In 2005, Islamic banking institutions controlled total assets of more than US\$ 262 billion, and mainstream financial actors are increasingly beginning to operate within this market segment.¹⁶⁵ Reports issued during 2006 indicate that the Islamic finance sector, which complies with Sharia law, was worth up to US\$ 500 billion, compared to US\$ 200 billion in 2004.¹⁶⁶

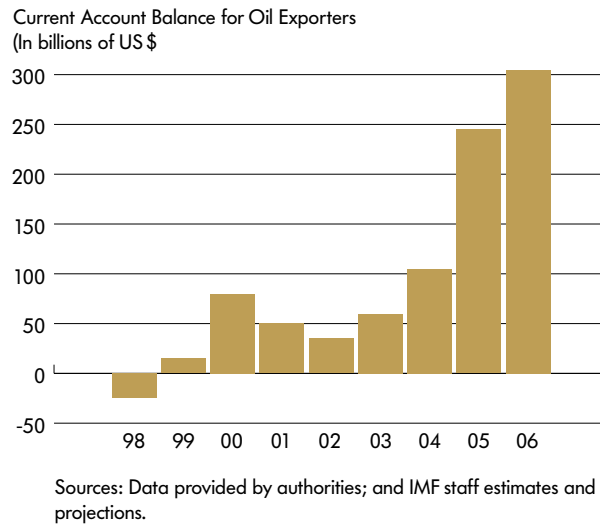
“The strong corporate performance has given the financial flexibility to the companies in the region to look for investments outside the region. The investment funds and private equity players are getting strong support from the investors in terms of increased investment in both Islamic as well as conventional funds to fund the deal flow. Apart from looking at the interesting opportunities in the region, the investment companies/corporates are looking at other promising markets outside the MENA region to diversify their investment base/revenues.”

openPR on Global Investment House findings, March 2006¹⁶⁷

Currently, an estimated US\$ 1 trillion of Arab money is invested outside the region¹⁶⁸ and the Abu Dhabi Investment Authority is estimated to have the largest investment portfolio in the Arab world¹⁶⁹ with assets valued at anything between US\$ 250 billion and US\$ 500 billion.¹⁷⁰

IMF projections for the past five years show steadily increasing current account balances for oil exporting countries.¹⁷¹

CURRENT ACCOUNT BALANCE¹⁷²



“The six-fold increase in world oil prices since 1998 has generated a business boom in the Gulf – not seen in a long time. The six GCC member countries [...] are expected to earn \$370bn this year, up from \$157bn in 2003. Consequently, rising government and corporate investments are creating opportunities for asset financing of large industrial/infrastructure projects and other big ticket transactions”

The Middle East, October 2006¹⁷³

“Considering the financial resources the current oil boom has made available, we are doing a poor job”

Mishal Hamed Kanoo, deputy Chairman of the Kanoo group quoted in Invest Dubai, Summer 2006 edition¹⁷⁴

The role of the financial sector in reinvesting oil revenues is of crucial importance, not only for the oil exporting countries, but also for the rest of the world. The Abu Dhabi Investment Authority, ADIA, has publicly stated its interest in the emerging economies of the world, particularly China, India and Russia, and investments in the energy sectors of these countries have already been made.¹⁷⁵

3.

GRASPING THE
OPPORTUNITY
IN A GLOBAL
ECONOMY

The UAE in many ways represents an ideal environment in which to investigate the challenges and opportunities facing Arab companies. Home to both Abu Dhabi and Dubai, it encompasses both oil-rich and relatively diversified economies, as well as hosting both traditional companies that copy a Western business model and those looking beyond conventional business models.

3.1 The United Arab Emirates

“We knew little of the world beyond our sandy shores and clear blue waters. The world knew even less of us, the people of the Arabian Gulf. Who would have dreamed that things could change so dramatically?

When I look back at our humble beginnings, I can hardly believe our business and our country have come so far, so fast. I was only 15 years old when I began working as a clerk. At the time, some of my countrymen still made a living from pearl diving. Life was simple; our needs were few.

Nobody knew then what lay in store: the development of our vast oil resources, the birth of a nation, the building of our infrastructure, the swift growth of our economy.”

Abdullah Hassan Al Rostamani, Chairman Al Rostamani Group, quoted on group home page¹⁷⁶

The United Arab Emirates comprises of seven separate sheikdoms, Abu Dhabi (the capital), Dubai, Sharjah, Ajman, Umm al-Qaiwain, Ras al-Khaimah and Fujairah.¹⁷⁷ The two most populous emirates are Abu Dhabi and Dubai, which together house 66 percent of the close to four million people living in the UAE. Just over 20 percent of the population is local,¹⁷⁸ and strict rules of property ownership limit foreigners to Freehold property in designated areas¹⁷⁹ and foreign ownership of businesses to Free Zone Enterprises in Free Trade Zones.¹⁸⁰

The UAE's Head of State is President Sheikh Khalifa bin Zayed Al Nahyan. The federal system of government includes a Supreme Council made up of the rulers of each emirate, the Council of Ministers, which is the executive authority, the Federal National Council, which has a legislative role and the Federal Judiciary, which includes the Supreme Court and lower Courts. Each emirate then has its own local sovereign government following a similar pattern of municipalities and departments.¹⁸¹

When the Arabic news channel Al Arabiya conducted an online poll of the most admired leader in the Arab world, the individual receiving by far the most votes was Sheik Mohammed bin Rashid Al Maktoum.¹⁸² Currently the UAE Vice President as well as the Prime Minister and Ruler of Dubai, he was also included in TIME Magazine's list of "100 people who shape our world" alongside other famous names such as Bill Clinton, Bill Gates and Huang Guangyu.¹⁸³

Dubai is positioned as a regional business hub, and is home to the regional headquarters of six of the top 10 companies on Fortune's Global 500.¹⁸⁴

"Like Singapore and its 'founding father' Lee Kuan Yew, Dubai's leaders have taken advantage of a tradition of strong government to develop the infrastructure and business-friendly policies that they see as critical to making the emirate a stable magnet for business in an unstable region."

FDI Magazine, June 2003¹⁸⁵

As the Emirate of Dubai receives by far the majority of media attention in the region,¹⁸⁶ less is known of the UAE as a whole. The UAE has taken the lead amongst the GCC member countries in diversifying its economy away from oil dependency; from being one of the most dependent, with oil revenues comprising approximately 90% of total GDP in 1980, to a figure of 50–60% in 2004.¹⁸⁷



According to the Abu Dhabi Chamber of Commerce and Industry, this Emirate recorded the world's highest per capita income of US\$ 46,200 in 2005, as export revenues increased dramatically from the figures recorded in 2004.¹⁸⁸ Abu Dhabi accounts for more than 90 percent of the country's oil and gas reserves and production.¹⁸⁹ Since 1976, the oil surplus of Abu Dhabi has been invested by the Abu Dhabi Investment Authority, ADIA, which is considered to be the largest investment fund in the Arab world.¹⁹⁰ Oil and gas comprises more than 50 percent of the Emirate's GDP.¹⁹¹

In comparison, Dubai has far smaller oil and gas reserves, with these revenues making up only six percent of its GDP.¹⁹² A great challenge, therefore, concerns the manner in which the Emirate anticipates meeting the expected increase in energy demand, which is estimated to triple by 2015.¹⁹³ The focus of economic diversification has up to now been the tourism sector and this is still considered a key area of focus. Of the approximately 12,000 new hotel rooms that will become available in the UAE between 2005 and 2008, over 9,500 of these will be located in Dubai.¹⁹⁴ The rapid development and pace of construction is visible throughout the Emirate.

The Dubai government has three investment arms while Abu Dhabi has two.¹⁹⁵

“Hardly a day passes without one of the UAE investment arms getting into the international spotlight with reports or speculations about takeover attempts or bidding wars, thus sending a strong signal across global investment circuits that the country is ready to take on new challenges and opportunities.”
Invest Dubai, January-February 2006 edition¹⁹⁶

So what are Arab companies doing to position themselves to survive in the global economy? It seems nothing. Arab business houses tend to be family run businesses where secrecy, individualism, bad decision-making and poor management practices are the rule rather than the exception. This leaves them weak and unable to compete in a new world economic order where size is strength. Arab companies continue to find the idea of merging their businesses to protect their markets and market share from larger more efficient multi-nationals a difficult concept to grasp. This is largely the fault of the otherwise excellent virtue of loyalty developed through the value system of Arab society. Khalaf Ahmed Al Habtoor, Chairman of the Al Habtoor group, in Al Shindagah Magazine, March 1999¹⁹⁷

The UAE's development model has on the one hand created several challenges, while the pace, available investments and the apparent initiatives for leadership on the other hand point to the potential to turn these challenges into opportunities through the implementation of innovative development solutions.

“The Arab world is currently facing many political, economic, social and security challenges. It is obvious that many suggested solutions are based on the reactions in the short term not on long-term strategies. This, in turn, can worsen the situation and add more complications. We should effectively use the time we have, to plan and implement good strategies.”

Mohammed Al-Gergawi, Former Chairman of the Young Arab Leaders Executive Chairman Dubai Holding, quoted in Arab News, November 2004¹⁹⁸

In order to deal with the challenges and grasp the opportunities that exist within the UAE, as well as provide leadership both within the Arab world and beyond, innovative projects and initiatives are required. Currently these innovative projects and initiatives are not very common, but many groups are engaged in activities which may comprise elements of the solutions that will be required in the future. Below are some examples of organisations (in alphabetical order) involved in education, conference arrangements, networks for leaders and other relevant spheres of activity. New projects and initiatives could build on the experience, knowledge and networks that already exist within and between these and other organisations.

Dubai Centre for Corporate Values: a joint initiative by the Dubai Technology and Media Free Zone Authority (DTMFZA), the Dubai International Financial Center (DIFC) and Dubai Airport Free Zone Authority (DAFZA), aimed at promoting the awareness and practice of corporate social responsibility (CSR) in Dubai's business sector, primarily in the Free Zones.¹⁹⁹

Dubai Ethics and Resource Centre: established by the Dubai Chamber of Commerce and Industry to foster corporate integrity. The vision is to become the leading ethics center in the region.²⁰⁰

Emirates Centre for Entrepreneurship: established by CERT, the commercial arm of the Higher Colleges of Technology in the UAE, in collaboration with MIT's Sloan School of Management and the MIT Entrepreneurship Centre to develop Executive Education programs in the Middle East.²⁰¹

Emirates Environmental Group: a non-governmental organisation devoted to protecting the environment through education, action programs and community involvement. The organisation includes a Corporate Social Responsibility network for companies.²⁰²

Mohammed bin Rashid Establishment for Young Business Leaders: established to influence the perception of Dubai nationals towards entrepreneurship and lower the barriers of entry for new entrepreneurs. This establishment was created to co-ordinate programs to support entrepreneurship.²⁰³

YAL – UAE Chapter: the Young Arab Leaders comprises a network which aims to create opportunities for Arab youth in education, leadership development, and entrepreneurship. It has nine country chapters and one in the UAE.²⁰⁴

Zayed International Prize for the Environment: established to support the vision of Sheikh Zayed Bin Sultan Al Nahyan, the first President of the UAE, this prize awards US\$ 1 million to winners who are seen as supporting his legacy of environmental protection.²⁰⁵

3.2 The questionnaire²⁰⁶ and the top 100 companies list

No official list of the top 100 companies in the UAE exists. It was therefore required to enlist the assistance of a number of different stakeholders in the process of establishing such a list. Since the two leading business Emirates are Abu Dhabi and Dubai, which contain 26 percent and 38 percent of all registered business establishments respectively,²⁰⁷ the two Chambers of Commerce and Industry were requested to assist by providing their membership lists. Other relevant actors, such as the magazine “The Middle East” which publishes an annual “Top 100 Arab companies” list, comprising mainly publicly listed companies, Zawya, which operates a comprehensive regional business portal, and Menabusiness, an online business community for the Middle East and North Africa, were also approached for assistance in order to ensure a comprehensive list of the top 100 companies in the UAE.

To include family-owned, government-owned and publicly listed companies proved immensely challenging, since the family and government-owned companies are subject to very few public disclosure requirements, making it difficult to determine the appropriate criteria for ranking the “top 100”. The most comprehensive lists were provided by the two Chambers of Commerce, each of which also performed their own “ranking” of the companies.

The Dubai Chamber of Commerce and Industry (DCCI) provided a list of 110 major commercial enterprises in Dubai. The selection was made by the Chamber's Information Services Department which stressed the fact that the list was not exhaustive, but did include "active and major" companies.

In the case of the Abu Dhabi Chamber of Commerce and Industry (ADCCI), the Department of Information Technology and Member Relations provided a list of 50 top companies according to market capitalisation in 10 different sectors, comprising wholesale and retail trade, industry, construction, financial services, transportation services, education and training, tourism, health care, maintenance services and consultancy.

From each of the Chambers' lists, 33 random companies were selected. In the case of the ADCCI list, the six most relevant sectors were identified as wholesale and retail trade, industry, construction, financial services, transportation and tourism. Within each of these sectors, five to six companies were randomly selected.

Since both Chambers stressed the fact that their lists were not comprehensive, and in order to ensure that publicly listed companies were included, another 34 companies were randomly selected from the stock exchanges Abu Dhabi Securities Market and Dubai Financial Market (17 from each stock exchange).

As far as possible, the representation of multiple companies from the same holding group was avoided, and every attempt was made to include parent companies or group holding companies rather than subsidiaries. The final list of companies is included in Appendix C of this report.

In certain instances, ownership structures proved somewhat labyrinthine, but as mentioned every effort was made to extract the most accurate information from the most relevant organisations.

3.3 Contacts with companies

Through initial telephonic contact, attempts were made to identify the most suitable individual within the organisation, to whom the questionnaire would then be directed. Alternatively, general contact was made by either fax and/or e-mail followed. Of the companies in the final list, approximately 27 percent of the contact details provided by ADCCI, DCCI, ADSM and DFM²⁰⁸ proved to be incorrect, despite the fact that companies with insufficient contact details had been excluded during the selection process.

Official contacts from the lists rendered five responses, either by direct exchange or by forwarded requests. One more response was received through a contact provided by the general switchboard. The remainder were received through connections where interested individuals or previously established

networks assisted in the collection of responses. One appropriate contact was also identified through a news article and several more through their participation in relevant events.

In general, however, the contact process with companies proved difficult compared with other countries.

Answers to the questionnaire were sought from individuals as high up in the corporate structure as possible. A small number of questionnaires reached the senior management structures of certain groups, while others were circulated within the organisation for quite some time, before finally being answered by one or more individuals.

3.4 The results of the questionnaire

1. Do you think environmental care is important?

The fact that 100 percent of the respondents viewed environmental care as important should be seen within the context that the reply rate was 25 percent. Its results cannot be considered a reflection of the views of the business community as a whole. It is likely that a degree of self-selection occurred, in the sense that those companies which responded to the questionnaire are likely to possess a higher degree of interest in sustainability issues than what is the norm.

Interestingly more than half (seven out of 12) of contacts at companies who are members and/or supporters of groups working with CSR issues and leadership initiatives, did not respond to the questionnaire. In several instances, it appeared that a policy of engagement in leadership and sustainability issues was in place within a company since an initial positive response was received, but despite assurances of participation in the survey, no responses were forthcoming.

1.1 If yes, why is environmental care important to you? (more than one answer is possible)

It improves export possibilities	20%
We have company customers who demands this	20%
We sell environmental products/service	4%
It's part of our companies core values	68%
It is part of cultural core values	56%
It saves money as we use less resources	32%
It can be used as a marketing tool to increase sales	44%
Our business depends on natural resources	24%
We use it as a competitive advantage against competitors	24%
Other reason(s)	8%
it is important for our shareholders, reputation	

The most common response (68 percent) was that environmental care forms part of the company's core values, and the second most common referred to cultural core values. These cultural values were also highlighted in several interviews with companies.

Interestingly, many companies (44 percent) view environmental care as a marketing tool to increase sales. Conversely, export possibilities and demand from customers scored relatively low responses (20 percent each).

These responses might in part be ascribed to the somewhat dual approach to environmental issues that currently seems to dominate large parts of the international business sector. On the one hand there appears to exist a willingness within companies to link long-term sustainability concerns to core values, but on the other, many companies still view CSR and environmental issues as public relations matters that have little to do with core business processes. This dual approach clearly reveals the fact that companies do not as a rule integrate sustainability into their strategic decision processes.

Interviews with a number of the respondents confirmed the existence of the dual approach. The constant requests from foreign actors in particular for UAE companies to financially support conferences, projects and marketing material may have created a situation in which many companies associate the sustainability rhetoric with, in the best case, philanthropy and in the worst case, so-called 'greenwashing'. When meeting with companies in the UAE the standard question asked of the interviewer was "What do you want us to pay for?". The concept that an environmental organisation such as WWF exhibited an interest in engaging with companies in the UAE to support them in integrating sustainability concerns into core business practices was in most cases completely unfamiliar.

Once acquainted with the concept, however, the responses from the companies generally proved overwhelmingly positive to the approach.

2. What does the term "sustainable business" mean to your company? (more than one answer is possible)

We will have a long-term profitable business	60%
We handle our waste in a responsible way	32%
We ensure goods and services that can continue to be delivered in the future	28%
We ensure goods and services that can continue to be delivered in the future with concern being attributed to global challenges, e.g climate change	40%
It means a business that will continue to grow/expand over time	24%
It means a business that will continue to grow/expand over time due to environmental care	52%
It means we follow a company strategy to handle environmental impacts by our business	32%
It means that we use emerging social and environmental challenges as drivers for innovation	36%

The responses to this question proved particularly interesting, with the majority of companies (60 percent) equating the term “sustainable business” with long-term profitability, while the second-highest response (52 percent) identified environmental care as a determinant of long-term expansion.

This is a somewhat encouraging finding, as it may provide an opportunity for discussions regarding the ability of companies to ensure that they can evolve within a changing business environment in which resource efficiency will become increasingly important. Furthermore, since an encouraging percentage of respondents (36 percent) indicated their intention to use emerging social and environmental challenges as drivers for innovation, it may prove viable to pursue such discussions with leading UAE companies.

3. Do you produce products/services that can help the environment?

Yes	No	Don't know
48%	48%	4%

The responses to this question proved particularly interesting, with the majority of companies (60 percent) equating the term “sustainable business” with long-term profitability, while the second-highest response (52 percent) identified environmental care as a determinant of long-term expansion.

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4. Does your company have access to information about the markets (current and future) for sustainable goods and services in the following markets

	Yes	No	Don't know	N/A
EU	60%	12%	16%	12%
US	56%	16%	16%	12%
China	36%	20%	24%	20%
India	32%	16%	32%	20%
South Africa	16%	24%	28%	32%
Brazil	12%	20%	36%	32%
Other GCC countries	52%	16%	20%	12%
Other MENA countries	44%	16%	24%	16%

The responses to this question indicate that the countries mentioned can be divided into two distinct categories. The first is established markets, comprising primarily the EU and USA (60 and 56 percent respectively), as well as neighbouring countries (52 and 44 percent for the GCC and MENA countries respectively). By contrast, the remaining countries can be categorised as emerging markets, with far lower levels of information available (between 12 and 36 percent). This information gap implies that significant potential may exist for collaboration with emerging economies and also points to a requirement for the UAE government to explore this potential, particularly in the light of the high number of companies which answered “Don’t know” or “N/A” for the emerging economies as a group (44 to 68 percent). In this regard, the follow-up question below indicates a high level of interest in this type of information.

5. Would you like information about markets for sustainable goods and services [Yes: 88 percent, No: 12 percent]

6. Would you like support in exporting products/services that can help the environment? [Yes: 48 percent, No: 24 percent, Don’t know: 24 percent, no answer: 4 percent]

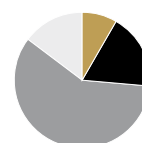
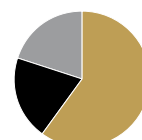
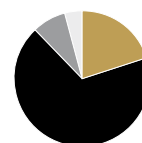
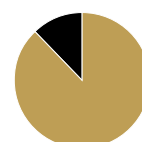
6.1 If yes, do you have specific suggestions for how this support could look like?

There exists a keen interest in information regarding potential markets for sustainable goods and services (88 percent), but far less interest in possible support for exporting these products (48 percent). During the interviews, it became clear that the respondents realise the importance of a strong domestic market, and since many companies are unsure of how best to develop such sustainable products and services, they feel that it would prove particularly difficult to export these items in the absence of a domestic or regional market. In addition, the companies interviewed expressed a requirement for government support in identifying markets that are “ready” for such goods and services.

7. Do you disclose your company’s environmental impact today? [Yes: 20 percent, No: 68 percent, Don’t know: 8 percent, no answer: 4 percent]

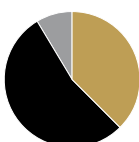
7.1 If yes, do such reports include Carbon emissions? [Yes: 60 percent, No: 20 percent, Don’t know: 20 percent]

7.2 If no, does your company plan to disclose its environmental impact in the future? [Yes: 8,5 percent, No: 18 percent Don’t know: 59 percent, no answer: 14.5 percent]



Only 20 percent of the respondents currently disclose their environmental impact. Only two energy companies and one ICT firm currently report on carbon emissions. Quite surprising is the fact that only 12 percent of the companies plan to disclose their environmental impact in the future. Again, the low overall response rate of 25 percent may imply that such behaviour is even rarer amongst UAE companies in general.

In this context, it may be in the interests of the UAE to implement reporting standards based upon initiatives like the Global Reporting Initiative, which establish reporting standards and place a strong emphasis on implementation and enforcement. Some of the respondents requested information regarding possible parameters to be included in their future reporting.²¹⁰



8. Do you promote any of your company's products/services as environmentally friendly through advertisement?

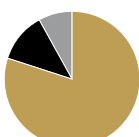
[Yes: 37.5 percent, No: 54 percent, Don't know: 8.5 percent]

Of the respondents, 37,5 percent answered this question in the affirmative, but a review of major publications such as the Gulf News and Khaleej Times revealed very few such advertisements. During interviews, however, it became clear that some companies include press releases in their promotion of environmentally responsible products and services, implying that such information is less obvious than would be the case with direct advertising.

9. Do you analyze the environmental consequences when you make major investment decisions?

Yes	No	Don't know	N/A
76%	16%	4%	4%

More than 75 percent of companies responded positively to this question, an encouraging figure, although further studies are required to ascertain the extent to which environmental consequences are analysed, and the manner in which companies apply the findings of such analysis.



10. Do you buy and/or use any of the following products/services:

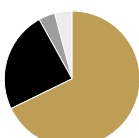
a) Energy efficient appliances (e.g. energy efficient refrigerators, air conditioners, light bulbs, etc)? [Yes: 80 percent, No: 12 percent, Don't know: 8 percent]

b) Teleconferencing for meetings instead of flying to the meeting venue?

[Yes: 68 percent, No: 24 percent, Don't know: 4 percent, no answer: 4 percent]

c) "Telecommuting" (allowing employees to work from home)?

[Yes: 24 percent, No: 76 percent]



A high percentage (80 percent) of companies claim that they buy energy efficient appliances. In this regard, further research is required to understand the guidelines applied by these companies and the manner in which these can be utilised to support those companies supplying energy-efficient appliances. Furthermore, a more in-depth understanding of the drivers for energy-efficient consumption would prove valuable in identifying factors such as government regulations, economic incentive structures or information campaigns that prompt companies to adopt such procurement policies.

The use of teleconferencing is relatively widespread (68 percent) and in this regard it would prove interesting to investigate the type of technologies applied, and whether the possibility exists to develop domestic solutions which addresses this demand, as well as potential export demand in the future. Furthermore, the possibilities for collaboration with different stakeholders to set up leading ICT examples for innovative business could be explored; for example an economic development zone built around cross-border collaboration over between the UAE, China and India.

The use of telecommuting is 24 percent and this trend could be expected to increase, given the region's rapid urbanisation.

11. Have you heard about the following concepts/organizations:

	Yes	No	N/A
YAL, Young Arab Leaders	72%	16%	12%
CSR, Corporate Social Responsibility	68%	20%	12%
WWF, World Wide Fund for Nature	80%	12%	8%
UAE-GBC, Green buildings council	40%	36%	24%
EEG, Emirates Environmental Group	72%	16%	12%
AK Comics and "Middle East Heroes"	8%	76%	16%

There exists a high level of recognition for domestic organisations and initiatives with high national or international profiles, and CSR is a well-known concept. During interviews, however, it became evident that many companies view CSR in terms of philanthropic activities such as sponsoring conferences or contributing to worthy causes. It is therefore vital that actors such as YAL, WWF and EEG clearly communicate their expectations to these companies, in order to alter their perceptions of CSR so it follows the global development. Integrating elements of CSR reporting requirements into companies' financial reporting structures may assist in this process.

12. How would you rate your company in terms of abiding by the laws and regulations for environmental protection?

Breaking the law	4%
Trying to lower the standards	0
Following the standards	48%
Going beyond the standards	28%
Going beyond the standards and suggesting new tougher standards	16%
N/A	4%

The majority of the respondents see themselves as following the standards (48 percent), but there is also a significant group of companies that see themselves as going beyond the standards (28 percent). A small group of companies (16 percent) suggested that they are going beyond the standards and suggesting new tougher standards. The fact that such leaders exist was confirmed during interviews and discussions with key stakeholders.

It is notable that one company admitted to breaking the law, which might reflect a very honest assessment of the situation in the UAE, in terms of the fact that while in certain sectors environmental regulations do exist, at the same time, the enforcement of these is lacking. This point was discussed during interviews and it appears that the general consensus amongst companies is that an obligation exists to abide by the existing regulations (see question 14).

13. How would you rate UAE/Arabic companies in general in terms of abiding by the laws and regulations for environmental protection?

	Very few	Few	Many	Very Many	N/A
Breaking the law	4%	36%	16%	12%	32%
Trying to lower the standards	16%	24%	20%	8%	32%
Following the standards	12%	12%	64%	8%	4%
Going beyond the standards	36%	36%	4%	0%	24%
Going beyond the standards and suggesting new tougher standards	64%	8%	0%	0%	28%

Almost half (40 percent) of the respondents felt that “Few” or “Very few” of their competitors are breaking the law, while 28 percent felt that “Many” or “Very many” were doing the same. However, several companies were unwilling to assess anything other than the companies following the standards. Almost three quarters (72 percent) felt that “Few” or “Very few” of their competitors are going beyond the standards and suggesting new tougher standards.

14. Do you think there is a need for a process that strengthens the rules for environmental reporting, transparency and monitoring for large companies?

Yes	No	Don't know	N/A
88%	4%	4%	4%

This is a striking result, as 88 percent of companies expressed their support for more rigorous regulations regarding environmental reporting, transparency and monitoring. By comparison, similar studies conducted by WWF in India and China revealed figures of 69 percent and 85 percent respectively, suggesting that environmental awareness and willingness to comply with regulations are particularly high amongst the UAE companies that replied.

15. Would you be interested in discussions with other stakeholders about promoting sustainable development in UAE and internationally?

Yes	No	Don't know	N/A
72%	12%	8%	8%

The willingness expressed by respondents to participate in dialogues with relevant stakeholders in order to promote sustainable development is high (72 percent). This may be due to the fact that many of the existing initiatives in the region have been educational in nature, and some companies now wish to become involved in such processes in a more practical manner. This point was mentioned during interviews and implies that initiatives focusing upon concrete measures linked to companies' core business might enjoy a high degree of support from progressive companies.

16. Do you think support is needed for UAE companies to become global leaders in providing sustainable solutions? (i.e. solutions that can provide welfare with reduced environmental impact and resource demand)

Yes	No	Don't know	N/A
84%	0	12%	4%

The respondents clearly indicated that government support is required in order to become global leaders in providing sustainable solutions (84 percent). Concrete guidelines in this regard are however not yet in place, and it is therefore vital that the support which does exist for regional cooperation leads to concrete actions rather than being limited to a series of discussions and conferences.



17. Does your company see regional cooperation as important in order to take the lead with sustainable goods and services on a global scale?

GCC [Yes: 88 percent, No: 4 percent, Don't Know: 4 percent, No Answer: 4 percent]

MENA [Yes: 80 percent, Don't Know: 8 percent, No Answer: 12 percent]

17.1 If so, which countries/companies/organizations would be especially important to include?

Regional cooperation is seen as very important; 88 percent and 80 percent of respondents felt that cooperation with GCC and MENA countries, respectively, was important.

The majority of respondents included all or several of the oil-producing Gulf states as particularly important, and several pointed out the energy and transport sectors as well to include, seemingly preferring a multi-stakeholder approach. Other detailed responses include the GCC as a whole, neighbouring countries, NGOs and key governmental bodies such as DEWA.

18. Would your company be interested in:

	Yes , participate	Yes, take the lead	No	Don't know	N/A
A network looking for ways to deliver resource efficient solutions to global challenges	56%	4%	20%	12%	8%
Possible projects changing the outward face of the Arab world	60%	20%	4%	8%	8%
Collaborations with emerging economies supporting export opportunities for innovative solutions	60%	8%	4%	20%	8%
Arab leadership looking at ways to deal with global challenges such as how to meet an increasing energy demand internationally	60%	8%	8%	8%	16%
Developing material for the Arab world about global challenges (such as decreasing natural resources) and the regional potential to solve them	32%	12%	16%	24%	16%
Developing material for an international audience that highlights sustainability initiatives	44%	8%	12%	24%	12%
Exploring Arab concepts as guiding tools for sustainable business innovation in the UAE and internationally	48%	16%	4%	20%	12%

Many of those companies exhibiting a willingness to take the lead in various areas, also provided suggestions for ways forward in other areas.

CONCLUSIONS
FROM THE
PROCESS OF
CONTACTING
COMPANIES:

During the process of collecting the responses, a number of trends became apparent and these can be summarised as follows:

1. A lack of clear responsibility inhibits proactive behaviour.

In many instances, no clear line of responsibility existed within companies for sustainability leadership. With only one exception, the switchboard could not direct the interviewer to the most appropriate individual in the company. In the case of the handful of companies that did appear to have a communication strategy in place, it would seem that the principal driver is risk management, and that these companies generally do not exhibit a great deal of proactive behaviour.

2. Opportunity to link sustainability to core business activities.

Given the lack of clear responsibility exhibited by the majority of companies, as described above, the survey elicited some particularly interesting responses regarding the possibility of linking sustainability to core business practices. This may in part be due to the fact that different departments within companies responded to different questions. This is a departure from the practice in most Western companies, where public relations divisions are usually mandated to provide information without consultation with other divisions. The practice of involving more than one division, however, is in line with the approach favoured by WWF, and may in fact prove advantageous to these companies in terms of providing more opportunities to link sustainability concerns to core activities.

3. Networks are fundamental for action among UAE companies

As evidenced by the difficulty experienced in obtaining responses from companies, a network of contacts is vital to achieving meaningful results amongst companies in the UAE. Obtaining the support of key individuals within an organisation for sustainability issues will in turn promote the spread of these concepts throughout the contact network of these individuals.

4. RECOMMEN- DATIONS FOR GLOBAL LEADERSHIP

4.1 Recommendations for UAE companies

It is important to note that all the recommendations below should be viewed in a broad context and that they are intended to be incorporated into projects and initiatives such as those presented in Chapters Five and Six.

1. Companies wishing to contribute to sustainability could cooperate with government and NGOs in order to ensure that an overarching investment and export framework is developed that supports sustainable development.
2. Companies with sustainable goods and services for export could collaborate with government and NGOs to develop export strategies in specific sectors such as ICT, construction and energy services.
3. Progressive companies might select a limited number of concrete projects located in the Arab world and beyond, implement these and communicate the results to key stakeholders. These projects should be linked to the core business of the companies, rather than being philanthropic.
4. Companies that wish to contribute to sustainable development could utilise relevant fora to highlight key areas of activity and possible means of progress in these areas. Within the Middle East, such fora could include the Arab Strategy Forum, Gulf Cooperation Council conferences, or the newly initiated Abu Dhabi Economic Forum. Foreign fora should also be utilised, particularly to build stronger ties to China, and in this regard the following events may provide opportunities to communicate new ideas and plan concrete actions for sustainable development; the BOAO Forum for Asia, the China Beijing International High-Tech Expo/China Economic Summit, the China International Fair for Investment & Trade (CIFIT), the China–ASEAN Expo and the Chinese Export Commodities Fair (Canton Fair).
5. Companies should improve their transparency and reporting requirements, for example, by adopting principles such as those contained in the Global Reporting Initiative or other similar systems, which provide a framework for reporting analogous to International Financial Reporting Standards.
6. All major companies should develop a strategy addressing the business opportunities that will arise from a phasing out of fossil fuel for energy and transportation.
7. Individual companies should revisit their ability to respond to surveys such as this one, relating to links between their core business activities and sustainable development. The overwhelming majority of companies seem to have limited their CSR activities to philanthropy and public relations activities, without exploring the opportunities to link these activities with core business practices.
8. Companies could develop sustainability strategies for a resource-con-

strained business environment, again with a focus on core business activities. These strategies should move from the implementation of reactive end-of-pipe solutions to consider business activities which promote long-term sustainability. In this regard, the WWF discussion paper on CSR could serve as a useful point of departure.²¹¹

9. Companies could develop public communication strategies which lay out the benefits of economic diversification, both within the UAE and in foreign markets. Such communication should highlight new opportunities and future challenges presented by such diversification.
10. Companies should demand from their international clients and partners that CSR initiatives are related to the core business strategies. Today, too many consultants and conference organisers seem more interested in producing reports and arranging conferences than actually contributing to measurable change.
11. One of the most positive responses elicited by the survey concerned the opportunity of engaging in a network which investigates the means by which to deliver solutions to global resource challenges. This interest, together with a high level of interest in participating in discussions with other stakeholders in the UAE and internationally, suggests that it may prove feasible to establish a discussion forum which examines possibilities for the implementation of concrete business solutions. Actors such as the WWF could play a role in this process.

1.2 Recommendations for Government actors in the UAE

1. Authorities might initiate a sustainable cities dialogue with China and India in which strategies for investments in urban solutions are jointly developed.
2. Support could be provided for initiatives where UAE/Arab companies establish joint initiatives with key actors in emerging markets.
3. The possibility of developing a sustainable investment strategy for the UAE could be further explored. This might include both domestic policy development, aimed at promoting sustainable urban solutions, as well as criteria for international investment to address the resultant increase in demand for such solutions.
4. The possibility of developing a sustainability index for the local stock markets could be explored.
5. Strategies could be developed for participation in relevant global events and fora where sustainable Arab companies can be promoted.
6. The UAE government and local authorities could explore ways to sup-

port leadership in the corporate sector. Thus far, legislation regarding resource efficiency and environmental care has focused upon the enforcement of minimum standards rather than support to progressive companies. Such support could take the form of financial or non-financial incentives. At the same time, however, compliance, disclosure and reporting requirements should be increased, as per the standards prescribed by the Global Reporting Initiative or other relevant systems.

7. Initiatives could be explored that set sustainability targets for the construction industry and such solutions could be promoted internationally.
8. The government could investigate the potential for environmental compliance certification to contribute to the attraction of foreign investment and support local companies in obtaining such certification.
9. The possibility of establishing a number of demonstration projects and innovation centres, with the objective of increased exports of sustainable solutions in areas such as ICT and energy, could be investigated.
10. Through multilateral and bilateral negotiations, the government could play a more active role in the development of regulation affecting Arab companies in other countries, such as the EU, China and India, particularly in terms of sustainability issues.
11. The concepts of sustainable urbanisation, so-called “green” or “intelligent” buildings and sustainability as a driver for innovation ought to be further developed in the UAE. Government agencies should therefore explore ways to support these initiatives, and wherever possible this process should be undertaken in consultation with other emerging economies such as China, Brazil and South Africa.²¹²
12. The government could encourage partnerships between Arab companies and NGOs such as the WWF to support the export of sustainable goods and services. In this regard, a work programme containing defined targets could be developed and implemented during 2007. This would explore the role of procurement in the major importing nations such as the US, EU and Japan.
13. The definition and promotion of sustainable investments could be explored.
14. Criteria for public procurement that contributes to a sustainable development could be developed.
15. An annual report providing an overview of the sustainability situation in the UAE, possibly including an overview of the most relevant economic sectors such as construction, ICT and energy.
16. The government could emphasise reduced resource dependence and sustainability through innovation rather than focus upon mitigation of negative impacts through the application of ‘end-of-pipe’ technologies.

4.3 Recommendations for foreign governments and companies

While there is a general global consensus that current production and consumption patterns are not sustainable, most foreign governments have only focused on the Middle East as a source of fossil fuel. The demand for increased oil production without any engagement regarding sustainability is striking. This was seen for example in the aftermath of hurricane Katrina. High pressure was put on OPEC to increase its output as US production capacity was damaged. A month after the hurricane, G7 ministers called upon oil producing countries to make more oil available, as they alleged that the high oil prices posed a risk to global growth.²¹³ The following day, the UAE's Energy Minister stated that the UAE would increase its refining capacity in order to produce more oil.²¹⁴

1. Foreign governments and companies that have a relationship with the GCC countries should develop strategies supporting diversification into more sustainable industries within these countries.
2. For each of the recommendations for Arab companies and the UAE government, foreign governments and companies should explore means by which they can support Arab companies that are taking the lead regarding sustainable development.
3. Foreign governments might investigate means by which changes in domestic regulations can promote the importation of sustainable goods and services from the UAE. A concrete example in this regard is public procurement policy,
4. Similarly, foreign companies could examine their supply chains as well as their UAE customers, in order to ensure that they are supporting progressive companies within the UAE.
5. Tourism is another area in which sustainability engagement with foreign governments and companies is required, due to the fact that this sector has assumed such a prominent role in the diversification of the economy, of Dubai in particular.

5. FIVE PROJECTS FOR UAE COMPANIES IN THE 21ST CENTURY

It would appear that the most feasible way to implement the recommendations contained in the previous chapter is through a series of specific projects. WWF hopes that companies in the UAE will find these projects interesting and partner with organisations such as WWF if they think that would help. Furthermore, companies from other countries in the Arab world are of course encouraged to explore the possibilities for participation in similar initiatives if they are suitable in the context where they operate.

For each of these initiatives, WWF wishes to see the development of clear measurable outcomes and time lines. No project should last longer than three years, following which the results achieved should be objectively assessed. Suggestions regarding measurable outcomes are included in the description of each project.

5.1 Material for the Arab world regarding global challenges and the regional potential to address these

Many of today's global challenges have emerged only in the last decade or two, and the majority of existing institutions were of course never intended to address them. It is therefore no surprise that a lack of capacity exists in terms of developing innovative solutions to these challenges. Consequently it is vital that students and young entrepreneurs are provided with an in-depth

understanding of the magnitude of current global challenges and the scale of effort that will be required to address these. Even more important, however, is the imperative to provide such students and entrepreneurs with an understanding of the opportunities that exist in addressing these challenges.

Across the world, there rightly exists a strong focus upon education as a driver for solutions to many social issues. At the same time, however, the value of such education is considerably diminished if it is not placed into a larger context. For this reason, when young people are well informed in terms of the current situation regarding sustainability, it is important that the opportunity for action, as well as role models who have achieved concrete results, are provided.

The development of relevant material for the Arab world should therefore include major issues such as natural resource consumption, the changing geopolitical situation, energy security, demographic changes and urbanisation and technology development. The material should also position the challenges in a global, rather than a national or regional, context.

It is also important that this material emphasises solutions to the challenges, as well as various areas in which individuals and organisations can contribute to the implementation of these solutions, both as consumers and within their professional environments.

MEASURABLE
OUTCOMES:

1. A scientific background report based upon established international consensus. This could, for example, be based on studies such as Millennium Ecosystem Assessment and the World Environmental Outlook.
2. Material that communicates global challenges in a manner that engages young entrepreneurs to search for solutions. This could possibly expand upon existing means of communication such as comic book characters (e.g., Middle East Heroes from AK Comics in Egypt²¹⁵) or cartoons (e.g., Freej from the UAE²¹⁶).
3. An overview of positive role models from the Middle East, either companies or individuals that have contributed to the resolution of global challenges in innovative ways.
4. As a result of this material, at least 10 new initiatives should be implemented within two years, focusing on sustainability as an innovation driver and the role of entrepreneurship in promoting a proactive approach to addressing global challenges.

5.2 Promoting Arab leadership in addressing global challenges such as increasing international energy demand

There is an urgent requirement to link global challenges to business development. In order for the business sector to be committed to addressing these challenges, it must be able to identify opportunities for profit. Given a dynamic business sector, a group of leading innovators could create and support a project in which a particular global challenge is transformed into a business opportunity.

A vital element of such a project would involve background research into concrete and profitable business models that provide sustainable solutions. Through the involvement of management experts, an innovation guide could be developed in which such business models can be explored and further developed.

In order to remain competitive in the future, it is vital that innovation and business development are encouraged. Given the appropriate supporting environment, the UAE could play a leading role in the development of innovative solutions that look beyond incremental changes.

MEASURABLE OUTCOMES:

1. A report providing an overview of existing initiatives that contribute to sustainable development, in particular those containing proactive solutions and concrete projects.
2. An innovation guide containing information for professionals in key sectors, such as construction, ICT, energy and finance, regarding opportunities for integrating sustainability concerns into core business practices and earning returns from the implementation of such sustainability solutions.
3. Within three years, at least eight companies have utilised the innovation guide to develop profitable new products and services that support sustainable development.

5.3 Collaborations with emerging economies aimed at supporting export opportunities for innovative solutions

In terms of non-oil trade, China and India are two of the UAE's major trading partners¹ and these two countries therefore provide excellent opportunities to create export opportunities for sustainable goods and services.

As a significant portion of the growth in the world economy will take place in Asia over the coming decades, the region, and particularly China and India, must comprise a major element of any country's foreign trade strategy. The UAE will therefore be well served by enhancing its ties with these countries and earmarking significant resources towards the creation of bilateral and trilateral economic links.

MEASURABLE OUTCOMES:

1. Joint initiatives between Arab and Chinese companies, focusing on the development of sustainable solutions, products and services.
2. A report providing an overview of existing relations between the UAE, China and India, and the opportunities and challenges they present.
3. A guide for collaborations between UAE companies and those in China and India, including examples and experiences gained from successful business collaborations.
4. At least three new significant collaborations inspired by this guide within three years.

5.4 A better understanding of the Arab world

In a service-oriented economy, creating and maintaining a positive international image is of tremendous value to any country. In this regard, the UAE has already begun to establish such an image, and this process must be continued with the full support of the government. This will place the country in an excellent position to promote the development of resource-efficient products and service industries.

In October 2006, Forbes Magazine listed the top 40 Arab brands, which included five companies or brands in this study.²¹⁸ It therefore appears that there already exists a solid foundation of credible brands which possess the necessary assets to provide core business solutions that can address sustainability challenges.

MEASURABLE
OUTCOMES:

1. A list of projects that provide a positive contribution and have the support of credible international actors.
2. Features by major international economic and business publications on positive initiatives implemented in the UAE.
3. The promotion amongst key global decision-makers of the UAE as a constructive force in addressing global challenges, particularly in key economic fora.

5.5. Exploring the potential of Arab concepts as guiding principles for sustainable business innovation within the UAE and internationally

As a region possessing a rich cultural heritage, that has managed to sustain civilisations despite a lack of natural resources, the Middle East possesses a number of cultural and religious principles that may prove very valuable in promoting the development of sustainable development principles and solutions which can be applied in other regions of the world.

From a company perspective, WWF hopes that these principles and concepts can be applied in the development of new strategies and business models that promote sustainability.

MEASURABLE
OUTCOMES:

1. Within two years, Arab concepts are used by 12 UAE companies in the development of their business strategies.
2. Material regarding the use of Arab business concepts in the development of business strategies is introduced into at least 12 leading MBA programmes around the world within three years.
3. Arab concepts are considered during international economic negotiations, both to define and promote sustainable development as well as within economic institutions such as the World Trade Organisation (WTO).

6. THREE INITIATIVES TO SUPPORT A GLOBAL ARAB LEADERSHIP

In order to promote Arab leadership in the global sustainability arena, a number of possible initiatives could be launched in which leaders from the region can collaborate with like-minded counterparts across the world. Some of these initiatives can be implemented by individual Arab countries such as the UAE, but over time these should evolve to include more countries in the region. In this regard, significant opportunities exist for the involvement of Qatar, Kuwait and of course Saudi Arabia in such processes.

The three initiatives suggested below are intended to provide a framework in which a number of projects, such as those suggested in Chapter Five, can be implemented in order to ensure a higher impact. Although different, these initiatives exhibit a number of areas of overlap.

The first initiative is a political initiative, aimed at creating a strong link between the Arab world and China, which is set to become the world's largest economy within the next several decades. The second initiative is directed towards strategic collaboration between businesses in specific sectors, both within the Arab world and with other key emerging economies. The third initiative is a financial initiative where domestic and international investments are linked in order to promote sustainable development.

6.1 The establishment of a Sino-Arab axis for global sustainability

“I believe that more innovative, sustainable solutions will increasingly emerge from serving the BOP [Bottom at the Pyramid] markets than from the developed markets.”

C.K Prahalad, *The Fortune at the Bottom at the Pyramid*²¹⁹

The Arab world and China are home to two of the world’s oldest civilisations, both of which currently find themselves in a situation of extremely rapid change. In order to strengthen the collaboration between these two regions, the WWF proposes the establishment of a Sino-Arab axis for sustainability, and the implementation of projects that will reinforce this initiative. In this regard, two different types of initiative are of particular interest, the first being those initiatives that build on existing relationships, such as the ongoing dialogue regarding oil and energy, and the second being those initiatives that promote new innovative business cooperation.

EXISTING PROCESSES

One area in which to explore the possibilities for enhanced collaboration is the China-Arab Cooperation Forum.²²⁰ This Forum has already created a significant degree of international interest and may provide a first step towards the creation of an axis for global sustainability. The WWF believes that the third Ministerial Meeting of the China-Arab Cooperation Forum, to be held in Bahrain in 2008, may provide an ideal platform to launch a high-profile sustainability initiative.²²¹

INNOVATIVE BUSINESS COOPERATION

Innovative business cooperation may occur in several forms, but two areas are of particular interest to the WWF. The first of these is the concept of “twin cities”, in which cities in GCC are linked to cities in China, as well as in other emerging economies, in order to develop joint strategies and provide mutual support in the implementation of sustainable solutions. The second concerns a sectoral approach, focusing on collaboration in the key sectors of energy, ICT, construction and finance. These initiatives should also build on existing processes, such as the dialogue around energy security and ideas about high-tech collaboration, when possible.²²²

OBJECTIVE The objective of this initiative is to explore the possibility for collaboration between key actors from GCC and China, as well as other emerging economies, in the field of sustainability. This will involve identifying areas in which both countries possess expertise and/or potential, and from which both can gain an advantage in the form of becoming key exporters of sustainable solutions.

ASSUMPTIONS The following assumptions are made with regard to the creation of this Sino-Arab axis for sustainability:

- Both the GCC countries and China will develop rapidly over the next two decades, and during this period significant investment in new infrastructure will take place, implying a major impact on the energy and resource-intensity profiles of these countries for many decades.
- The governments of both the GCC countries and China realise the requirement for sustainable development models that differ substantially from those employed in developed countries.
- Due to the fact that China contains approximately one-fifth of the world's population, while the GCC countries have access to massive financial resources due to their oil exports, the growth paths chosen by these two rapidly expanding economies will have a major impact upon the possibility of achieving global sustainability.

PHASES The initiative can be broken down into the following phases:

- The establishment of a group of individuals drawn from the GCC countries and China who possess experience of the other country/region.
- The identification of a limited number of areas for intensive investigation, in which global sustainability needs exist.
- An invitation to relevant actors from countries outside the GCC and China to participate in dialogues concerning sustainability. This is particularly significant in terms of a move towards a global circular economy, an approach in which representatives from all three elements of the economic circle, namely consumers, producers and providers of natural resources, are involved in the implementation of sustainable solutions.²²³
- The establishment of an ongoing dialogue, in which key events and policy-making processes are identified over a two-year period. The focus should be on relevant areas such as urban solutions, trade promotion in terms of the circular economy described above, ICT solutions, public procurement, energy solutions and intellectual property rights (IPR) regulations. During these two years the “axis” will participate in these key events and promote the ideas developed during the preceding dialogue. After this period, the initiative should be evaluated and a decision taken regarding its continued existence.

6.2 Sustainable urban solutions for the 21st century

“Building and construction constitute the backbone of the various development policies which have either a negative or positive impact on the different development sectors. At the Arab level, the building and construction industry has achieved high development rates in the past three decades. Yet, in spite of such development, the economic and technical importance of this industry has not received the due attention due to the absence of any link within the Arab market, and the lack of integration and unity in the industry per se, being scattered in small country-based frameworks.”

League of Arab States, Sustainable Building & Construction in the Arab Region, June 2005²²⁴

This initiative targets the increasingly rapid urbanisation trend occurring across the developing world²²⁵ to promote innovative solutions for the 21st century that can create employment and export opportunities, particularly between these developing nations. Progressive companies should investigate those areas in which the greatest growth potential is located and develop strategies to take advantage of these.

The business sector is set to play an increasingly important role in the global quest for sustainable development over the next several decades. There exists a major requirement for the exploration of new and innovative solutions that can provide welfare without a high level of natural resource consumption. Addressing this requirement will call for approaches that look beyond incremental change and encourages companies to cooperate in the formulation of the type of incentives required to ensure this transition.

OBJECTIVE The objective of this initiative is to develop roadmaps which explore innovations that can move societies beyond incremental improvements in sustainability. The outcomes of the initiative should be practical tools that can be used both to develop new goods and services and to highlight the barriers that exist for companies to move towards sustainability. A particular focus will be on the means by which foreign companies and governments can support innovations in the Arab world that contribute to globally significant resource savings.

ASSUMPTIONS The initiative is built upon the following assumptions:

- The first is that there exists a consensus regarding a number of global challenges, such as the lack of sufficient natural resources to provide welfare to the developing world, given the massive over-consumption in the developed world. At the same time, however, it is assumed that these chal-

lenges do not necessarily translate into clear market signals that will affect the decisions of companies.

- The second assumption is that in many cases, solutions already exist for the challenges, but that insufficient incentives exist for companies to implement these solutions. Innovative solutions might not necessarily imply higher costs, but the current institutional structures and decision-making processes do not encourage their implementation.
- Finally, it is assumed that a window of opportunity exists for the implementation of sustainability solutions, but that at the same time, many of the countries where those solutions are most required, such as China and India, do not possess sufficient resources to effectively promote their implementation. This window of opportunity in China and India will gradually close over the next two decades and it is therefore vital that sufficient resources be deployed, sooner rather than later, to allow the GCC countries to assume a leadership role in the development and implementation of sustainability initiatives.

In order to be in a position to provide the solutions required, it will be necessary to move beyond the current paradigm and explore new directions in which business can develop.

To support innovation to the degree required, WWF will cooperate with relevant companies in order to create a roadmap for the development of sustainable products and services. WWF will also explore opportunities to create virtual “sustainable developer zones”, in which specific solutions to a limited number of challenges can be developed and exported to the international market.

The initiative will build on, and to some extent include, existing initiatives that are currently forming international discussions regarding sustainability as a driver for innovation.²²⁶ In this regard, WWF seeks to partner with leading companies that have already begun to integrate sustainability into their business strategies and their product and process designs.²²⁷

FOUR PHASES

WWF propose that the initiative is implemented according to a phased approach, as follows:

Phase one will:

- Identify a number of strategic companies that express a willingness to explore new means of providing sustainable welfare, particularly for urban populations, with drastically reduced consumption of natural resources.
- Develop a roadmap that explores means by which leading corporate actors

can encourage sustainable innovation by using key sustainability trends as drivers for core business decisions.

Phase two will:

- Describe ways in which these sustainability trends can translate into goods and services necessary to address global sustainability challenges.
- Identify the cost barriers that exist to the development of such goods and services, and suggest ways in which to remove them.

Phase three will:

- Establish a “sustainability innovator zone” on the internet, in which concrete challenges can be presented, for example, by government actors that are willing to pay private sector companies for solutions to these challenges. The role of the companies is to then encourage their employees and service providers to develop such solutions. This “zone” should build on the experience from existing software developer zones and has nothing to do with current free trade zones that exist around the world.

Phase four will:

- Develop and collect recommendations regarding the means by which foreign companies and governments can support sustainability leadership in the Arab world. These recommendations may range from changes required in intellectual property rights regimes and public procurement standards, to lending criteria and the structure of different industry standards regimes.
- Develop and collect recommendations regarding possible support measures by the Arab governments and other national stakeholders for innovative companies with export potential.

**ICT, ENERGY
AND FINANCE**

The solutions being sought by WWF are primarily related to sustainable urbanisation and the social needs that must be addressed if, as expected, more than half the world’s population will live in urban areas after 2007.²²⁸

WWF will as a result focus especially on companies from the ICT, energy and finance sectors, all of which exhibit significant influence in terms of increased urbanisation. As mentioned, innovation is the key focus, and as a result, WWF is looking for solutions that ensure systemic change, rather than incremental improvements in existing problem areas.

For the ICT sector, WWF is particularly interested in exploring the following services, selected on the basis of work that WWF has conducted in the EU, South Africa, China and India.²²⁹

1. Virtual meetings

- e.g. Audio and videoconferencing

2. Dematerialisation

- e.g. Text/information distribution through digital books/digital paper

3. Flexi-work/Telecommuting

- e.g. Systems allowing people to work away from the office

4. E-governance

- e.g. Web-based taxation, governmental web services

5. E-schools

- e.g. Distance education

6. Improved efficiency in existing businesses

- e.g. Smarter farming practices (linked to poverty alleviation, improved efficiency in businesses such as steel, paper and pulp)

7. Intelligent heating, cooling and lightning

On four levels

- Smart appliances (refrigerators, stoves, air-conditioning etc)
- Controlling temperature and lighting in houses and offices in intelligent ways
- Systems that allow optimal energy use and reduced peak demand within groups of buildings, for example within a city block
- Information to the customer that makes sustainable choices easier to make

8. Improved urban planning/smart living

- e.g. ICT that allows new ways to build cities and houses

In the energy sector, WWF would like to explore innovative ways of promoting integrated solutions that move beyond the supply- and demand-side management issues dominating current Western discussions. In this regard, WWF

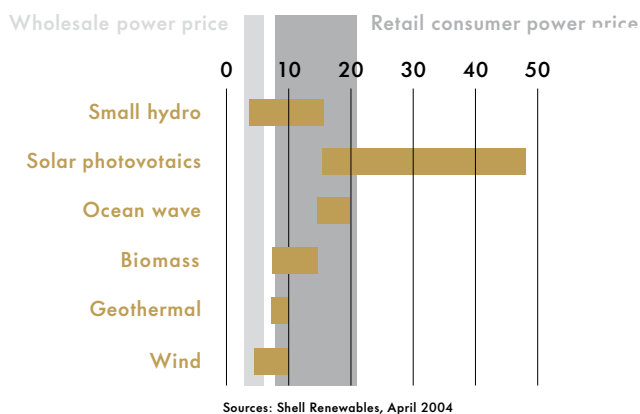
would like to explore solutions which allow houses to become net producers of energy, and allow businesses to move from being large consumers of electricity to being self-sufficient. Furthermore, WWF would also like to support companies that provide comprehensive low-energy solutions for cities and key industries.

The type of solutions in which WWF is interested will require collaboration between actors such as city planners, construction companies, IT companies, renewable energy providers and the financial sector.

In all cases, companies will be encouraged to demonstrate that the business

Not so dear

Cost competitiveness of selected renewable-power technologies, unit cost ranges, cents/kWh



The Economist, Dec 8th 2005

models proposed can be profitable, either within the current environment, or if supported by concrete price incentives.

6.3 Strategic investments for sustainable innovation

According to Standard and Poor's, project financing in the GCC was about \$45 billion last year. Analysts estimate the total infrastructure projects expenditure this year to exceed \$360 billion (Dh1 trillion). "Thanks to the huge domestic liquidity in the region, we see a lot more regional banks and private equity players competing for financing big ticket infrastructure projects". *Khaleej Times*, October 2006²³⁰

The discussions regarding investment and the financial sector's contribution to a resource-efficient society are to a large degree focused upon reactive behaviour. Only a few years ago, the majority in the financial sector considered their relation to environmental sustainability to be limited to philanthropic activities, in which a percentage of profits were donated to various environmental causes.

Subsequently, a number of companies began to consider the impact of their internal operations in terms of for example pollution and energy usage.²³¹

Recently, however, companies in the sector have begun to consider the environmental impact of their core business activities, for example in terms of the industries and projects to which they provide financing. With the emergence of initiatives such as UNEP-FI,²³² the Equator Principles,²³³ the Carbon Disclosure Project²³⁴ and the Global Reporting Initiative,²³⁵ a growing number of financial services companies have begun to review their policies regarding issues such as investments, credit ratings and company screening.

To date, almost all these companies, and the initiatives they have implemented, have applied a reactive approach, focusing on risk mitigation and the avoidance of investments in unsustainable companies and projects. Environmental organisations and the media are probably partly responsible for this reactive approach, since their focus has historically been on identifying those companies and projects that create environmental problems, rather than those exhibiting leadership in implementing innovative solutions.

As a result, very little attention has been paid to proactive projects which have been implemented in the financial services sector and which aim to actively promote sustainable development. Some financial services companies have implemented positive screening criteria in order to promote investment in sectors and companies they believe to be sustainable. These companies

however remain in the minority, and as a result, the flow of funds into solutions that would allow countries like China and India, as well as the poor parts of Africa, to improve both welfare and environmental sustainability is far smaller than what is required.

A practical strategy allowing actors in the financial services sector to contribute to sustainable development in a meaningful way has yet to be developed. Such a strategy should not only include a framework guiding current business practices, but should also include practical suggestions upon which companies can engage with national governments, in order to change current regulations and practices that inhibit investment in sustainable business ventures.

The financial sector is critical to the promotion of sustainable development, and it is therefore particularly important that leaders who recognise the value of business opportunities that promote sustainable development step forward as soon as possible. These leaders should promote active engagement, rather than simply avoiding destructive behaviour. The GCC is well placed to develop a financial services strategy focused on sustainable development, which links policies, innovative collaborations and strategic investments. The experience of Islamic finance products has proved that it is possible to develop new innovative instruments in today's global financial market. As the Islamic finance sector is set to be worth up to US\$ 500 billion in 2006, as compared to US\$ 200 billion in 2004,²³⁶ a sustainability initiative in this area that encourages resource efficiency and the use of renewable resources could set new standards for the global financial system.

OBJECTIVE The objective with this initiative is to develop a strategy for how GCC investments can contribute to global sustainability. Instead of following a pattern of specialised regional or domestic investments and applying the same model when investing internationally, a comprehensive investment strategy could contribute to innovation, increased welfare, and resource efficiency, especially for urban areas. Leading stakeholders can explore how a limited number of strategic projects in the GCC, combined with strategic foreign investments, can create new markets with a high international sustainability profile.

THREE ASSUMPTIONS²³⁷ 1. Firstly, there are already existing diversification efforts taking place. During the next several years, the GCC countries will invest heavily in infrastructure. Analysts estimate total infrastructure expenditure during 2006 to exceed US\$ 360 billion, with a further US\$ 1 trillion worth of projects planned or under construction in the region.^{238 239}

There also exists a growing understanding that investments in infrastructure and other areas must contribute to a more diversified economy that is well integrated in the global economy, particularly as Arab construction companies are increasingly venturing outside the Gulf region.

The UAE is estimated to spend about US\$ 154 billion (Dh565 billion) between now and mid-2008 to boost future growth, according to a report by Standard Chartered Bank. This marks a significant improvement in fiscal policy, as the UAE and other countries in the region are showing a strong desire to spend money – to help boost their economies' long-term potential.

More importantly, this spending is no longer focused purely on developing the region's oil and gas reserves. Instead, much of the efforts are now aimed at introducing new sectors where the region may have a competitive advantage. *Emirates Today*, May 2006²⁴⁰

The increased liquidity in the region and the state of the stock markets in the GCC should also be taken into account when a sustainability strategy is developed, as should criteria for Initial Public Offerings (IPOs). While these factors do not directly influence infrastructure development, the stability of stock and real estate markets are often closely linked.

In order to maximise the effectiveness of support to sustainable domestic investment, it is also necessary to review the regulations guiding foreign investments in the region. This review can take place partly in fora in which discussions regarding foreign investment into the GCC already take place.²⁴¹ In this regard, countries that receive significant amounts of FDI, such as the UAE and Saudi Arabia, US\$ 12 billion and US\$ 4.6 billion respectively during 2005, could take the lead.²⁴²

2. The GCC is also engaging in significant outward investment. As a result of sustained high international oil prices, the oil-rich nations have become significant contributors to global FDI flows, contributing a total value of US\$ 16 billion in 2005, an increase of 50 percent over the previous year.²⁴³ It is of course imperative that this outward investment be analysed from a global sustainability perspective, as well as from a perspective of the contribution of these outflows to sustainable development within the GCC countries. The possibilities for activities such as portfolio investments, green field ventures and mergers and acquisitions to contribute to sustainable urbanisation must be considered. Islamic bonds is one area that could be explored from a sustainability perspective.²⁴⁴

Fields in which significant growth of outward investment is taking place should be given particular attention. The fact that the UAE increased its number of cross-border mergers and acquisitions from 40 in 2004 to 4,783 in 2005 is a striking example of an area in which sustainability policies should be implemented as a matter of urgency.²⁴⁵

3. Rapid urbanisation calls for reduced resource consumption. The massive urban expansion is expected to increase sharply over the next 20 years, not only in the GCC but also in the rest of the world. This development will to a large extent determine the pattern of global resource demand. While the drivers might differ between and within regions, one common challenge exists; how can urban areas become resource efficient and provide people with welfare in a sustainable way?

Should investment in areas such as infrastructure and energy take place in a strategic manner, it could support innovation and promote welfare improvements in many of these newly urbanised regions. Should this investment, however, occur in a manner that does not promote sustainability, the result is sure to be sharp price increases in key commodities and conflicts over natural resources, as well as the increased destruction of natural habitats.

In order to make urban infrastructure sustainable, rapidly growing economies such as those in the GCC, as well as China and India, must collaborate in the development of innovative solutions which not only reduce resource consumption, but also present the opportunity to export these solutions to a world market in desperate need of such resource-efficient solutions.

Investments in natural resources in countries such as South Africa, often driven by rapid growth in urbanisation and industrialisation in other parts of the world, must also be analysed in order to determine means by which such investments can support a sustainable move up the value chain within these resource-rich nations.

FOUR PHASES

WWF propose that the initiative is implemented according to a phased approach, as follows:

Phase one will:

- Study the current domestic investments in the GCC, with a specific focus on a selected number of countries exhibiting an interest in playing a leading role in terms of strategic investments promoting sustainable innovation and urbanisation. Construction, energy and ICT are three key sectors that must be examined in the context of changes in the investment practices of the financial sector.

Phase two will:

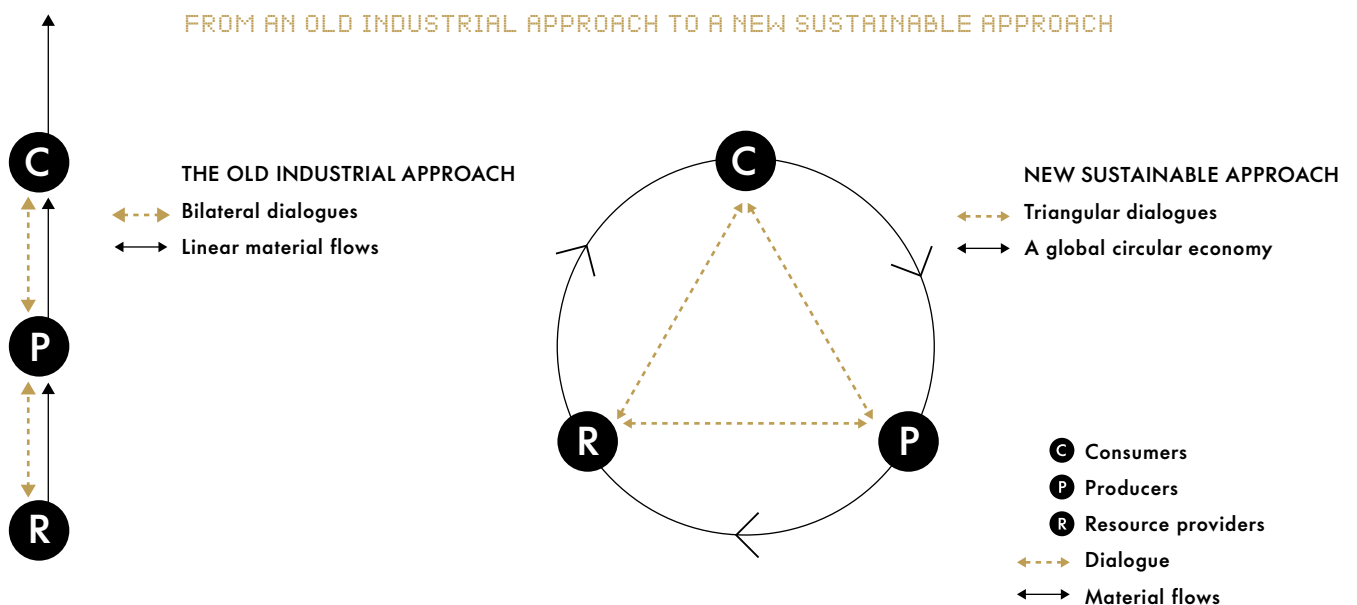
- Study outward investment from the GCC, with specific focus on the fast-growing emerging economies where the majority of investments in urban development are taking place. New investment regulations aimed at promoting sustainable urbanisation will also be analysed. The opportunities which exist for GCC countries to participate in strategic foreign urbanisation projects will also be included in the study.

Phase three will:

- Bring key stakeholders in the GCC together to discuss opportunities that can be created by linking foreign and domestic investments, for example, by promoting the export of innovative domestic products and services that contribute to sustainability through ownership of foreign companies. Such links between strategic domestic and foreign investment can reveal very interesting synergies and learning experiences. Furthermore, active participation in international fora, such as the WEF, UN conferences and leading trade fairs, could also increase the demand for sustainable goods and services from the GCC.

Phase four will:

- Present a strategy for domestic and foreign investment to support each other in a way that encourages development of sustainable business practices and export of sustainable solutions. This strategy should outline how the GCC can become a world leader in the promotion of sustainable financing practices. In this regard, a limited number of strategic projects, both in the GCC and beyond, could be developed and implemented.



Questionnaire

1. Do you think environmental care is important?

Yes	No	Don't know

1.1 If yes, why is environmental care important to you? (more than one answer is possible)

It improves export possibilities	
We have company customers who demands this	
We sell environmental products/service	
It's part of our companies core values	
It is part of cultural core values	
It saves money as we use less resources	
It can be used as a marketing tool to increase sales	
Our business depends on natural resources	
We use it as a competitive advantage against competitors	
Other reason(s)	

2. What does the term “sustainable business” mean to your company? (more than one answer is possible)

We will have a long-term profitable business	
We handle our waste in a responsible way	
We ensure goods and services that can continue to be delivered in the future	
We ensure goods and services that can continue to be delivered in the future with concern being attributed to global challenges, e.g climate change	
It means a business that will continue to grow/expand over time	
It means a business that will continue to grow/expand over time due to environmental care	
It means we follow a company strategy to handle environmental impacts by our business	
It means that we use emerging social and environmental challenges as drivers for innovation	

3. Do you produce products/services that can help the environment?

E.g. do you import, produce, manufacture products/services that can provide increased welfare combined with decreased use of natural resources and low/zero pollution (such as energy efficient bulbs and air conditioning, renewable energy, recycled material, videoconferencing services/equipment for reduced number of travels, etc.)?

Yes	No	Don't know

3.1 If yes, what products/services do you have that can help the environment?

3.2 If yes, do you export any of the products/services that can help the environment?

Yes	No	Don't know

4. Does your company have access to information about the markets (current and future) for sustainable goods and services in the following markets?

	Yes	No	Don't know
EU			
US			
China			
India			
South Africa			
Brazil			
Other GCC countries			
Other MENA countries			

5. Would you like information about markets for sustainable goods and services?

Yes	No	Don't know

6. Would you like support in exporting products/services that can help the environment?

Yes	No	Don't know

6.1 If yes, do you have specific suggestions for how this support could look like?

7. Do you disclose your company's environmental impact today?

Yes	No	Don't know

7.1 If yes, do such reports include Carbon emissions?

Yes	No	Don't know

7.2 If no, does your company plan to disclose your environmental impact in the future?

Yes	No	Don't know

8. Do you promote any of your company's products/services as environmentally friendly through advertisement?

Yes	No	Don't know

9. Do you analyze the environmental consequences when you make major investment decisions?

Yes	No	Don't know

10. Do you buy and/or use any of the following products/services:

a) Energy efficient appliances (e.g. energy efficient refrigerators, air conditioners, light bulbs, etc)?

Yes	No	Don't know

b) Teleconferencing for meetings instead of flying to the meeting venue?

Yes	No	Don't know

c) "Tele-work" (letting the employee work from home)?

Yes	No	Don't know

11. Have you heard about the following concepts/organizations:

	Yes	No
YAL, Young Arab Leaders		
CSR, Corporate Social Responsibility		
WWF, World Wide Fund for Nature		
UAE-GBC, Green buildings council		
EEG, Emirates Environmental Group		
AK Comics and "Middle East Heros"		

12. How would you rate your company in terms of abiding by the laws and regulations for environmental protection?

Breaking the law	
Trying to lower the standards	
Following the standards	
Going beyond the standards	
Going beyond the standards and suggesting new tougher standards	

13. How would you rate UAE/Arabic companies in general in terms of abiding by the laws and regulations for environmental protection?

	Very few	Few	Many	Very many
Breaking the law				
Trying to lower the standards				
Following the standards				
Going beyond the standards				
Going beyond the standards and suggesting new tougher standards				

14. Do you think there is a need for a process that strengthens the rules for environmental reporting, transparency and monitoring for large companies?

Yes	No	Don't know

15. Would you be interested in discussions with other stakeholders about promoting sustainable development in UAE and internationally?

Yes	No	Don't know

16 Do you think support is needed for UAE companies to become global leaders in providing sustainable solutions?

(i.e. solutions that provide welfare without polluting the environment or using more resources than the planet can provide over time – if everyone where to have the same level of welfare)

Yes	No	Don't know

16.1 If Yes, what kind of support?

17. Does your company see regional cooperation as important in order to take the lead with sustainable goods and services on a global scale?

	Yes	No	Don't know
GCC cooperation			
MENA cooperation			

17.1 If so, which countries/companies/organizations would be especially important to include?

18. Would your company be interested in:

	Yes, participate	Yes, take the lead	No	Don't know
A network looking for ways to deliver resource efficient solutions to global challenges				
Possible projects changing the outward face of the Arab world				
Collaborations with emerging economies supporting export opportunities for innovative solutions				
Arab leadership looking at ways to deal with global challenges such as how to meet an increasing energy demand internationally				
Developing material for the Arab world about global challenges (such as decreasing natural resources) and the regional potential to solve them				
Developing material for an international audience that highlights sustainability initiatives				
Exploring Arab concepts as guiding tools for sustainable business innovation in the UAE and internationally				

19 If you have any other comments, please feel free to provide them below:

APPENDIX B

Top 100 UAE companies list (contacted companies)

Abela and Company	Dubai Insurance
Abu Dhabi Aviation	Dubai Investments
Abu Dhabi Commercial Bank	Dubai Islamic Bank
Abu Dhabi Islamic Bank	Dubai National Insurance & Reinsurance
Abu Dhabi National Company for building and materials	Dubai Petroleum Company
Abu Dhabi National Energy Company	Dubai World Trade Centre
Abu Dhabi National Hotels Company	Easa Saleh Al Gurg Group
Abu Dhabi National Insurance Company	Emaar
Abu Dhabi National Paper Mill	EMCC Establishment
Abu Dhabi National Takaful Company	Emirates Airlines
Abu Dhabi Precast	Emirates Bank International/Emirates Islamic Bank
ADNOC Group	Emirates Building Company
Airlink International	Emirates National Oil Company
Al Abbar	Emirates Cable and Multi Media Company
Al Abbas Group	Emirates Computer Paper Printing Establishment
Al Aqili Group	Emirates General Petroleum Company (Emarat)
Al Dhafra Insurance Company	Emirates Technology
Al Fahim	Etihad Airways
Al Futtaim Group	Etisalat
Al Ghurair Group	Financial House
Al Habtoor Group	First Gulf Bank
Al Hamed Development and Construction – Sheikh Shaya & Partners	Gargash Enterprises
Al Mureikhy Industrial Group	Gulf General Investments Company
Al Naboodah Group	Gulf Power Company
Al Rahmani General Trading Company	Gulf Trading and Refrigeration Company
Al Rostamani Group of Companies	Jeema Mineral Water Company
Al Jaber Transport and General Contracting	Juma Al Majid Group
Al Qudra Holding	Kanoo Group
Al Sagr National Insurance Company	Lootah Group of Companies
Al Sayegh Brothers Trading	Majid Al Futtaim Group
Al Shirawi Trading Company	Mashreqbank
Al Tayer Group	Mid East Data Systems
Al Wathba Company for Central Services	Nakheel
Aldar Properties	Nasser Bin Abdullatif
Alliance Insurance Company	National Bank of Abu Dhabi
Aluminium and Light Industries Company (ALICO)	National Bank of Dubai
Amlak Finance	National Bank of RAK
Arab Bank for Investment and Foreign Trade	National Cement Company
Arab Emirates Investment Bank	Noor Capital
Arab Technical Construction Company	Oasis International Leasing Company
Arabian Construction Company	RAK properties
ASCORP Holdings	Shuaa capital
Badri Group of Companies	Sorouh
Belhoul Group of Companies	Tabreed
Bin Dasmal Group	Union National Bank
Commercial Bank International	Union Properties
Commercial Bank of Dubai	United Trading and Environmental Technology Company
Dana Gas	
Dubai Aluminium Company	
Dubai Bank	
Dubai Cable Company	
Dubai Dry Docks	
Dubai Holding	

Interviewed companies and organisations

Abu Dhabi Commercial Bank

Aldar Properties

Clientsoft

Dolphin Energy

Dubai Holding

Dubai Properties (part of Dubai Holding)

Kanoo Group

Lootah BCGas

Majid Al Futtaim

Mubadala Development

Nakheel

National Bank of Abu Dhabi

Pacific Controls Systems

Abu Dhabi Chamber of Commerce and Industry, ADCCI

Arab Sciences and Technology Foundation, ASTF

Dubai Electricity and Water Authority, DEWA

Dubai Ethics and Resource Centre, DERC

Emirates Center for Strategic Studies and Research, ECSSR

Emirates Environmental Group, EEG

Gulf Research Center, GRC

Gulf Venture Capital Association, GVCA

Ministry of Economy and Planning

Young Arab leaders, YAL

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Design Volt, www.volt.se

Typography Bricspixel (Bricspixel is designed for the WWF BRICS project), Century Expanded, Futura

Cover graphic While Arabic calligraphy's origin remains disputed, modern calligraphy has evolved into its own art form, influenced by the Islamic calligraphy of the Quran. As the Quran was spread and re-written different styles of writing developed. The stylized script on the cover spells out "Arab companies in the twenty first Century" and was made by the artist Nasser Al Abedin from the United Arab Emirates.

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WWF International

Avenue du Mont-Blanc
1196 Gland
Switzerland

www.panda.org/trade
trade@wwfint.org