

Press Review 12/2011 - Vietnam, Water and Environmental Technology,

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No	Title	Date	Source	Region	Catalogue	Description
1	Tan Rau bauxite plant pollutes	23/9/2011	Vietnam net bridge	Lam Dong	Wastewater	About 200 hectares of coffee, tea and fish pools in Bao Lam District, Lam Dong Province have been polluted by the wastewater released by the Tan Rai bauxite plant that contains sodium hydroxide (NaOH).
2	International Conference on Wastewater and Sewage Sludge Treatment in the Industrial Zone.	01/12/2011	Can Tho Newspaper	Can Tho	Wastewater	AKIZ Coordination Management Board Ministry of Science and Technology (MOST) support for development and evaluation) organized International Conference on Wastewater and Sludge treatment in the IZ.
3	Projects fail to clean Nhue-Day river basin	02/12/2011	Vietnam net bridge	Nhue- Day River basin	Environment	The Nhue-Day river basin continues to suffer from pollution despite a range of environmental protection projects that have been carried out on the area by several agencies including the Ministry of Natural Resources and Environment, a conference in northern Nam Dinh Province heard on Tuesday.
4	World Bank pledges to continue supporting nation's development	03/12/2011	VN News	Vietnam	Others	Vietnam hoped to receive more effective support from the World Bank in financial aid, policy making and management experiences for its forthcoming priorities of inflation control, stabilising the macro economy and ensuring social welfare
5	Denmark helps with funds	06/12/2012	VN News	MeKong Delta	Climate Change	Denmark will provide VND28 billion (US\$1.4 million) to help Cuu Long (Mekong) Delta provinces overcome the aftermath of the recent floods and adapt to climate changes impacts.
6	Government to give \$16m for flood repairs in 11 provinces	06/12/2012	VN News	MeKong Delta	Environment	The Government is to spend VND340 billion (US\$16.3 million) to mitigate the consequences of flooding in 11 provinces and cities of the Cuu Long (Mekong) Delta.



MOST-BMBF Office for
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Vietnamese – German Office for Water and Environmental Technology

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7	Hai Phong City waste projects get under way	08/12/2011	VN News	Hai Phong	Waste	Construction on sewerage and reservoir for Hai Phong City's environmental improvement project started on Tuesday in Hai Phong City.
8	Scientists call for water regulations	09/12/2011	VN News	HCM	Waste	Water is being wasted and needs to be conserved was the message from a scientific workshop on the usage of the precious resource organised in HCM City yesterday by the Southern Water Resource Investigation and Master Planning Union.
9	Enterprise pockets money, but doesn't treat waste	12/12/2011	VN Net Bridge	HCM	Waste	An enterprise receives money every month to treat waste, but it never treats waste, and just dumps rubbish at refuse tips. As such, the State has to pay money for waste treatment, but people still have to face the risks of catching diseases from untreated waste.
10	Discharge of untreated waste from industrial zones rampant	12/12/2011	VN News	HCM	Waste	The most serious environmental crimes involve food safety and discharge of waste, Phan Huu Vinh, deputy head of HCM City's Crime Prevention Department told the Sai Gon Giai Phong (Liberated Sai Gon) newspaper.
11	\$155m medical waste improvement project kicks off in Ha Noi	12/12/2011	VN News	Hanoi	Waste	A US\$155 million hospital waste water treatment project was kicked off yesterday by the Ministry of Health and financed by the World Bank in Ha Noi.
12	Carbon capture, storage has great potential in VN	19/12/2011	VN News	Hanoi	Energy	While carbon capture and storage (CCS) is a new concept in Viet Nam, the country offers good opportunities for the technology, especially in the energy sector.
13	Canal restocked with native fish	20/12/2011	VN News	HCM	Environment	Members of the Cycling for Environment (C4E) Club on Sunday rode their bicycles to release native fish species into the Cau Den Canal, a tributary of Sai Gon River.



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14	Delta told it must improve flood forecasting systems	20/12/2011	VN News	Mekong Delta	Environment	Weather forecasting must improve in the Cuu Long (Mekong) Delta so the region can better cope with floods and high tides, experts have said.
15	World Bank approves country strategy	21/12/2011	VN News	Vietnam	Others	The World Bank has discussed the Viet Nam Country Partnership Strategy (CPS) for the 2012-16 period and approved the first three operations under the new CPS, delivering commitment to support its transition to a successful middle income country.
16	Germany pledges \$372m in ODA	21/12/2011	VN News	Vietnam	ODA	The Federal Republic of Germany has pledged official development assistance (ODA) of more than US\$372 million to Viet Nam during the next two years – the biggest sum yet allocated.
17	Climate change gains focus at Durban meeting	21/12/2011	VN News	Vietnam	Climate Change	Global support to aid Viet Nam with issues related to climate change was affirmed during bilateral meetings between Viet Nam and other countries and international organisations.
18	Climate response lacks resources	26/12/2011	VN News	Vietnam	Climate Change	Insufficient human resources was a major challenge for Viet Nam in responding to climate change, said head of MONRE personnel and Organisation Department.
19	Vietnam still doesn't have regulations to treat electronics waste	26/12/2011	VN Net Bridge	Vietnam	Waste Treatment	Though the hazard from electronics waste has been warned for the last many years, the management and treatment of electronics waste in Vietnam have not made any considerable progress.
20	Mineral survey takes priority in new strategy	27/12/2011	VN News	Vietnam	Mine	Prime Minister Nguyen Tan Dung has ratified the country's mineral resources strategy for 2020 with a vision to 2030.
21	Discharged wastewater adds to Sai Gon River pollution	28/12/2011	VN News	HCM	Wastewater	The Sai Gon River and other rivers in HCM City have become more polluted because of increasing levels of waste-water from household and industrial waste.



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Tan Rai bauxite plant pollutes

About 200 hectares of coffee, tea and fish pools in Bao Lam District, Lam Dong Province have been polluted by the wastewater released by the Tan Rai bauxite plant that contains sodium hydroxide (NaOH).



The polluted water has a pH level that is far higher than the allowable limit.

Tran Duong Le, deputy director of the Management Board of the Lam Dong Aluminum-Bauxite Complex Project, said NaOH had indeed entered into the environment from the plant but the board had “corrected” the problem.

However, many people living around the plant in Loc Thang Town, Bao Lam District, said they are still not using water from wells for their daily activities or for watering tea and coffee plants.

According to Bui Cong Lien, deputy head of Cao Nguyen Tea Seedlings Company in Loc Thang Town, said, in late July, his company found that the wastewater discharged from the alumina plant smelt pungent and was effervescent and oily.

It made its way into the company’s 20-hectare water reservoir and killed fish en masse. The company thus reported to the Bao Lam District authorities and the management board of the project, but the problem had remained unsolved.

“We have to use running water for irrigation,” Lien said. “If the issue is not tackled soon, we will suffer great losses in the coming dry season.”

About 10 fish pools owned by locals have been suffering from the same pollution. Nguyen Thi Viet, a resident, said, the polluted water had killed all of the fish in her three pools as well as vegetables and thin-peel lemon.

Viet also said she had to use running water for her family’s daily activities.

Many other locals said they were very concerned about the impacts of the contaminated water on their health and the environment.

Excessive pH level

Nguyen Hoai Anh, head of the district Natural Resources and Environment Department estimated that about 200 hectares of coffee, tea and fish pools had been affected.

“We’ve inspected and found the wastewater was released from the underground sewerage of the plant and had a pH level of 12.6, which is far higher than the allowable limit of 6-9 in Vietnam,”

Hoai Anh said, adding that rain waters in the past few days had luckily diluted the contaminated water.

A test made later by the provincial Natural Resources and Environment Department showed that the pH level was 10.53.

The plant had improperly stored bags of powdered sodium hydroxide when it exposed them to rainwater, which dissolved the chemical and swept it away into the soil, the department said.

In addition, bags that contained the chemical were placed outdoors and the chemical that was left in the bags was also washed away by rainwater.

Le agreed and said the plant would liquefy the powdered chemical.

The department has fined the plant for violating environmental protection laws and requested it to take measures to stop and prevent further pollution.

Locals to be compensated

Vuong Kha Kim, deputy head of the district People's Committee, said the committee would request the polluter to compensate those who had suffered from the pollution.

Le said he hadn't received any claim for damage but promised to work with relevant authorities to determine the losses.

International Conference on Wastewater and Sewage Sludge Treatment in the Industrial Zone

AKIZ Coordination Management Board (Integrated Wastewater Management sponsored by German Development Bank, Federal Ministry of Education and Research (BMBF) and Ministry of Science and Technology (MOST) support for development and evaluation) organized International Conference on Wastewater and Sludge treatment in the Industrial Zone on 29th & 30th November 2011 at Kim Tho Hotel – No.01 Ngo Gia Tu, Ninh Kieu District. Attend to the workshop has the Representative of MOST, Can Tho Management Board of processing and industrial Zone and Professors, Experts of Environmental Treatment from German Universities and Vietnam, Institute of Chemistry, ect...

The conference reported on the most advantage technology for wastewater and concentrated sludge treatment, renewable energy from wastewater and making use of valuable materials, recovery biogas from sewage sludge by water distribution method; combination with surveys, monitoring, analysis to have database for mechanism control, especially for toxic wastewater and sewage sludge. After the workshop, experts paid visiting on Tra Noc Industrial Zone and the model applied the advanced wastewater process treatment supported by AKIZ project.

Projects fail to clean Nhue-Day river basin

The Nhue-Day river basin continues to suffer from pollution despite a range of environmental protection projects that have been carried out on the area by several agencies including the Ministry of Natural Resources and Environment, a conference in northern Nam Dinh Province heard on Tuesday.

The river basin covers 7,665sq.km and flows through the four northern provinces of Ninh Binh, Nam Dinh, Hoa Binh, Ha Nam and Ha Noi City. Chairman of the Nhue-Day River Environment Protection Committee Nguyen The Thao said all five administrative areas had not reached targets setting up at the start of the three-year programme titled Managing Water Quality in the Nhue-Day River Basin.

The level of pollution in the water had steadily deteriorated with many stretches of the river becoming seriously polluted, especially during the dry season, Thao said.

In 2008 Prime Minister Nguyen Tan Dung approved the project on Nhue-Day River's Environment Protection by 2020, with 12 small projects worth VND3.34 trillion (US\$163 million) from the State budget.

The present situation has been attributed to poor operations of the committee and possible solutions for improving water quality include building wastewater treatment systems using the Plasma Gasification Process and planting more trees at the river's source.

The ministries of Finance and Natural Resources and Environment plan to contribute more money for wastewater treatment systems and improving dyke systems and pumping stations along the river basin.

Protecting the river basin is seen as an important step in maintaining the socio-economic development of the five Northern provinces.

World Bank pledges to continue supporting nation's development

Vietnam hoped to receive more effective support from the World Bank in financial aid, policy making and management experiences for its forthcoming priorities of inflation control, stabilising the macro economy and ensuring social welfare, said Party General Secretary Nguyen Phu Trong.

Receiving World Bank managing director Sri Mulyani Indrawati in Ha Noi yesterday, Trong said he appreciated the group's effective support and co-operation in economic development, especially in projects of hunger elimination and poverty reduction, infrastructure construction, policy making and human resources development.

He also praised the effective co-operation of the group with relevant agencies and institutions in Vietnam, especially the State Bank of Vietnam.

He said that Vietnam was focusing on three tasks, namely completing the socialist-oriented market economy system; training human resources, specially the high-quality ones; developing infrastructure.

Indrawati highly praised Vietnam's socio-economic achievements, given the fact the country had been affected by the global financial crisis.

She also congratulated the country for coming out of a poor and less-developed status to become a middle-income country which, she said, would provide opportunities for Vietnam to access bigger financial resources of the World Bank.

Indrawati pledged the World Bank would continue its support for Vietnam's development targets.

On the same day, Prime Minister Nguyen Tan Dung received Indrawati and praised the effectiveness of the World Bank's co-operation and support that had helped Vietnam achieve socio-economic development as well as control inflation.

Dung said that Vietnam would keep priorities in controlling inflation, stabilising the macro economy, ensuring social welfare and maintaining growth at a relative rate in 2012. The implementation of economic development would exist alongside social advancement and equality, he said.

In response, Indrawati highlighted Vietnam as one of the developing countries which had gained important economic achievements, saying that such targets in 2012 would help the country continue its development towards sustainability.

Noting that the economy in Vietnam, like other ASEAN countries, was vulnerable to global economic changes since it depended much on exports, Indrawati said that a flexible management on financial and monetary policy framework as well as the economic restructuring were important to maintaining the sustainability of the economy in 2012.

Denmark helps with funds

Denmark will provide VND28 billion (US\$1.4 million) to help Cuu Long (Mekong) Delta provinces overcome the aftermath of the recent floods and adapt to climate changes impacts.

Under an agreement signed by the Danish Embassy in Viet Nam and the Ministry of Agriculture and Rural Development on Friday, the funds will be used to improve food security and living standards of some 80,000 farmers in the region, especially those in the Mekong Delta provinces of An Giang, Dong Thap, Kien Giang and Hau Giang, who were most seriously affected by the floods in 2011.

The funding would help restore rice cultivation that had been badly affected by the flooding, said Bui Ba Bong, deputy minister for Agriculture and Rural Development.

He said the funding was also expected to contribute to the Vietnamese Government's efforts to help these provinces to produce and provide rice varieties to the Cuu Long (Mekong) Delta.

Government to give \$16m for flood repairs in 11 provinces

The Government is to spend VND340 billion (US\$16.3 million) to mitigate the consequences of flooding in 11 provinces and cities of the Cuu Long (Mekong) Delta.

The money is to be used on the likes of pumping water to ensure production of the winter-spring crop.

The localities include Can Tho City and provinces of An Giang, Bac Lieu, Ben Tre, Dong Thap, Hau Giang, Kien Giang, Long An, Soc Trang, Tien Giang, Vinh Long.

Prime Minister Nguyen Tan Dung signed the decision and assigned chairs of People's Committees to allocate the money provided from the State Budget and oversee the work.

Committees were also required to use local budgets and other financial sources for the situation.

Meanwhile, the ministries of Finance and Agriculture and Rural Development would assess the implementation of Decision 142 issued in 2009 that provided policies and mechanisms to support the "seed and breed" programme to recover production in calamity-hit areas.

Statistics of the Central Committee for Flood and Storm Control show that this year's floods claimed 78 lives in the delta.

An Giang Province, one of the hardest hit, recorded 21 deaths and property damage estimated at VND877 billion (US\$42.6 million).

Hai Phong City waste projects get under way

Construction on sewerage and reservoir for Hai Phong City's environmental improvement project started on Tuesday in Hai Phong City.

The project aims to prevent flooding, improve water quality and increase appropriate solid waste treatment. It will rehabilitate and develop the existing drainage system, sewerage system and solid waste collection and treatment system. The goal is to improve the urban environment in Hai Phong City.

The US\$290 million project is being carried out with the Government of Japan's ODA and scheduled to be completed in 2015.

Scientists call for water regulations

Water is being wasted and needs to be conserved was the message from a scientific workshop on the usage of the precious resource organised in HCM City yesterday by the Southern Water Resource Investigation and Master Planning Union.

“These meetings will form the basic foundation for managers to better regulate water usage,” Pham Van Giang, director of the union said.

In HCM City, some 600,000cu.m of groundwater is exploited every day though only half legally.

As a result both the quantity and quality of groundwater have seriously declined.

To reverse the situation, Pham Van Hung, a scientist, said: “The city should carry out an overall investigation of groundwater use by households and then prepare a master plan to manage it.”

He also called for promoting research to conserve water.

Other experts tabled reports about exploitation of the two biggest river systems in the south, the Dong Nai and the Mekong.

More than 60 scientists based in southern Viet Nam attended the conference.

Enterprise pockets money, but doesn't treat waste

An enterprise receives money every month to treat waste, but it never treats waste, and just dumps rubbish at refuse tips. As such, the State has to pay money for waste treatment, but people still have to face the risks of catching diseases from untreated waste.

The enterprise is Bay Ha Long Company Ltd in Hiep Phuoc commune of Nhon Trach district in Dong Nai province, which has the function of collecting, carrying and treating waste. The noteworthy thing is that the Nhon Trach district's people's committee allows the company to dump rubbish free of charge.

Treating waste with no machines.

The enterprise still can sign the contracts on treating rubbish and waste even though it does not have any machines to treat waste.

Bay Ha Long was established in 2008 as a company specializing in collecting scrap materials and seconds. Since 2010, the company has one more function of collecting and carrying domestic waste and normal waste. Since then, it has signed a lot of contracts on collecting and treating domestic rubbish and industrial waste for a lot of enterprises in Nhon Trach district.

Phap luat TPHCM's reporters have got the contracts signed by Bay Ha Long Company which shows that the expenses for collecting and treating waste is 250,000 dong per cubic meters, not including tax.

Though Bay Ha Long works as a company specializing in collecting and treating waste for money, it has got the permission from the Nhon Trach District People's Committee to throw rubbish temporarily at the Dong Mu Rua rubbish dump in Phuoc An Commune.

The document signed by Giang Chi An, Deputy Chair of the Nhon Trach People's Committee on October 22, 2010, says that Bay Ha Long not only can throw domestic waste, but normal waste, called non-toxic industrial waste.

This has raised discontent to the other companies which also operate in the field of treating waste in the same district of Nhon Trach, especially in the Nhon Trach industrial zone. "Everyone knows that hazardous waste can regularly be seen among industrial waste. In order to treat the waste, we have to spend money to buy specific machines. Meanwhile, Bay Ha Long does not have to buy any machines.

They just receive money and throw waste to the environment," the owner of a waste treatment company said. "The local authorities allow Bay Ha Long to dump industrial waste in their localities without any treatment. It is an unhealthy competition," he added.

Hazardous waste found at dumping ground

An official of the Dong Nai provincial authorities said that the Dong Mu Rua rubbish dump once existed illegally in the past, which was arisen spontaneously when local residents needed some place to throw rubbish. After 2005, the local authorities allowed this to become a temporary domestic waste dump. Since the rubbish dump is located far from residential quarters, local residents still have not complained about the smell.

However, since the dumping of rubbish still does not follow the requirements, the pollution emissions prove to be unavoidable.

Phap luat TPHCM's reporters, who were present at the rubbish dump on December 4, found out that there was not only domestic rubbish, but hazardous waste as well.

The reporters could see fluorescent lamps (with mercury which is extremely toxic) among the domestic rubbish.

The waste is carried to the rubbish dump, where it is temporarily buried or burned in the open air. Dr Le Huy Ba from the HCM City Industry University has warned that in the near future, the water leaking from the temporary waste dump would disseminate into the environment, which will make it very difficult to be treated.

Discharge of untreated waste from industrial zones rampant

The most serious environmental crimes involve food safety and discharge of waste, Phan Huu Vinh, deputy head of HCM City's Crime Prevention Department told the Sai Gon Giai Phong (Liberated Sai Gon) newspaper.

What is the most serious environmental crime in industrial activity?

That would be untreated solid waste released from industrial zones, which has increased in terms of volume and hazardous substances. Only a very small amount of solid waste has been classified and treated properly. It's estimated that only 20 per cent of hazardous solid waste of total industrial waste has been registered, managed and treated properly.

What are the most common crimes?

Most industrial zones and export and processing zones have built waste-treatment systems, but those systems are not operating properly or do not meet standards. Many businesses ignore many steps in treatment process due to the high cost of treatment. They intentionally build underground piles to release untreated waste into the environment.

Many crimes are very sophisticated. For example, businesses release the untreated waste at night or on holidays when environmental inspectors do not work officially. They treat the waste improperly. Many businesses build two systems, of which only one system works properly in order to cope with inspectors. Worse still, many bury the untreated waste within the business's area or discharge the untreated waste directly into the forest, fields and ponds or lakes.

What about the management of waste-treatment at hospitals and clinic centres?

At present, only 20 per cent of hospitals and clinic centres have waste treatment systems that meet standards. Most waste from hospitals and clinic centres is untreated or improperly treated, which seriously affects the natural environment, water, air and land. Much waste from hospitals and clinic centres like bottles, lines, needles and plastic gloves are illegally collected and sold to other people for recycling.

What are the main causes of environmental crimes?

There are many. But the most significant cause is that many localities have issued investment licenses for businesses so easily, neglecting considerate assessment of the projects and the waste treatment activity at those companies.

Businesses have not been asked to build waste treatment systems. State management over environmental crimes is completely lagged.

In addition, planning for industrial and export processing zones still faces a lot of hurdles, which affects the natural environment. The speed of urbanisation is high, which also contributes to worsening pollution.

What solutions does C49B propose?

The key task is to work closely with other relevant agencies to better discover and manage all cases of environmental crimes across the country. C49B would work with press agencies to disseminate information and educate people and businesses about environmental laws. It would also focus on the prevention and fighting against environmental crimes in all fields.

\$155m medical waste improvement project kicks off in Ha Noi

A US\$155 million hospital waste water treatment project was kicked off yesterday by the Ministry of Health and financed by the World Bank in Ha Noi.

The project aims to minimize environmental pollution due to medical waste from hospitals in order to improve people's health.

The 6-year plan would help strengthen policies relating to medical waste management and establish solid and water waste treatment systems for at least 150 hospitals.

If implemented effectively, the project would allow for improved operation, management and observation of waste treatment systems by medical staff in four institutes: Labour Medicine and Hygiene Environment, HCM City's Public Medicine and Hygiene, Pasteur Nha Trang and Tay Nguyen Hygiene and Epidemiology.

"Improving medical waste management and treatment is one of key tasks for the health sector," said Health Minister Nguyen Thi Kim Tien.

Medical waste treatment systems would initially be installed in 16 hospitals in the Cuu Long Delta, in Long An, Dong Thap, Ben Tre and Tien Giang provinces, as well as six central hospitals in the north. Priority would be given to state hospitals at central and provincial levels or inter-district general hospitals with pressing demand, according to Tien.

Statistics from the Ministry of Health showed that more than 1,260 hospitals and over 1,000 medical clinics nationwide have discharged around 350 tonnes of solid waste (600 tonnes by 2015) and 150,000 cubic metres of liquid waste per day. However, 56 per cent of hospitals nation-wide have no waste water treatment system at all.

Until now, 70 per cent of hospitals with waste management systems have failed to meet current standards, and 50 per cent have separated and collected solid medical waste following the process of medical waste management regulation.

Carbon capture, storage has great potential in VN

While carbon capture and storage (CCS) is a new concept in Viet Nam, the country offers good opportunities for the technology, especially in the energy sector.

Deputy Director of the Ministry of Industry and Trade's General Directorate of Energy Le Tuan Phong said at a recent conference that as a clean technology, CCS could help Viet Nam reduce the emission of carbon dioxide in its efforts to respond to climate change.

CCS is known as a technology used to prevent large quantities of carbon dioxide from being released into the atmosphere, mitigating the contribution of fossil fuel emissions to global warming. Accordingly, carbon dioxide (CO₂) from large point sources is captured and then stored in such a way that it does not enter the atmosphere.

Oil fields, gas fields, saline formations, unmineable coal seams, and saline-filled basalt formations have all been suggested as carbon dioxide storage sites. This method involves injecting carbon dioxide, generally in supercritical form, directly into underground geological formations.

In Viet Nam, energy generation is the second largest source of greenhouse gas emission, just behind agriculture.

The estimated total primary energy consumption in Viet Nam reached 44 million tonnes of oil equivalent last year. As much as 86 per cent of energy consumption was supplied by fossil fuels. More than half of its 21.3 GW total electricity installed capacity was thermal power, hydro power contributing about 34.8 per cent while natural gas power plants contributed 31.4 per cent.

The Ministry of Natural Resources and Environment has forecast that the energy sector would generate a total of 224 million tonnes of CO₂ from now to 2020. Other industries will contribute 10 million tonnes of CO₂ per year.

Meanwhile, so far, every KWh generated by coal releases 0.52gram of carbon dioxide.

Viet Nam and the Asia Development Bank (ADB) recently entered into talks about co-operation in CCS application at coal-fired power plants.

ADB Deputy Country Director Andrew Head said that last year, the bank had provided US\$1,250 million Regional Technical Assistance to four Southeast Asian countries including Indonesia, the Philippines, Thailand and Viet Nam to evaluate the potential for CCS in the countries' energy sector.

It focused on the oil and gas power sector, coal plants and other industry facilities.

Study findings show that since the country is largely dependent on the use of fossil fuels for power generation, it offers good opportunities for CCS.

Due to a high level of oil and gas production development, there are short-term opportunities for carbon dioxide storage in conjunction with enhanced oil recovery.

Le Dinh Hoe from Vietsopetrol's Research and Engineering Institute said that carbon dioxide injected into declining oil fields can increase oil recovery by reducing the viscosity of crude oil as gas mixes with it.

Moreover, gases including CO₂, natural gas or nitrogen are injected to repress rise reservoirs when oil is pumped up while air cannot be used because the oil could catch fire.

Costs associated with capturing, transporting and storing carbon dioxide were high, he said, adding that it was good to impose a tax on greenhouse gas emission to support enterprises involved in clean technology projects.

Findings also revealed challenges for Viet Nam to develop CCS including its CO₂ storage being offshore, its natural gas processing industry not presently producing pure streams of CO₂ and its plan for future coal-fired power plants appearing subcritical.

The two-day conference, titled "Carbon Capture and Storage in Viet Nam", was organized by the ADB, the Asia-Pacific Economic Co-operation (APEC) and the Ministry of Industry and Trade.

Canal restocked with native fish

Members of the Cycling for Environment (C4E) Club on Sunday rode their bicycles to release native fish species into the Cau Den Canal, a tributary of Sai Gon River.

More than 20 members of C4E Club cycled through HCM City's major streets, displaying slogans exhorting the public to utilise native fish in aquariums as well as releasing them into the wild.

More than 250 native rasbora (*Rasbora paviana*), bred by the non-profit organisation Wildlife At Risk (WAR), were released into the Cau Den Canal in HCM City's District 2.

Rasbora fish have the ability to survive in seriously polluted water as well as closed water sources during the dry season, scientists say. As this species feeds on organic matter, it is able to clean organic substances from domestic wastewater.

"People should use native fish for releasing to the wild or keeping in home aquariums instead of imported ones. This action will contribute to repopulating native fishes," said Bui Huu Manh, WAR's Senior Conservation Officer.

"More and more residents in HCM City are using native fish in home aquariums," Manh said.

More than 300 native fighting fish (*Betta* sp.), which were bred under WAR's programme to breed and release native fish species to the wild, have been released this year into tributaries of the Sai Gon River.

Delta told it must improve flood forecasting systems

Weather forecasting must improve in the Cuu Long (Mekong) Delta so the region can better cope with floods and high tides, experts have said.

Flood forecasting must be accurate and timely, especially in the context of climate change, they said.

Forecasting includes measurement, data collection, data-information transmission, report writing and dissemination of information.

Effective flood-forecasting can help reduce 30 per cent of losses caused by floods, according to the National Centre for Hydro-Meteorological Forecasting. Many serious floods have occurred in the Mekong Delta this year, with the volume and level becoming more and more serious than in previous years, especially since the 2000-02 period.

Flood forecasting activities must be modified, and long-term plans for coping with floods needed to be carried out, the centre said.

According to the Southern Hydro-Meteorology Centre, most serious floods this year have been caused by an extremely large volume of rainfall in the middle of Laos and in lower Laos areas and the Central Highlands region. Thus, flood forecasting work must be focused on these areas.

Nguyen Ngoc Anh of the Southern Irrigation Planning Institute said that, unlike floods in previous years, floods this year occurred quickly, which made it difficult for some provinces in the Delta to cope.

Anh said the high tides and rising sea levels caused by climate change present even more obstacles to accurate flood forecasting.

Forecasting must take into account climate change in order to become more efficient and effective, he added.

According to a report from the Institute of Meteorology, Hydrology and Environment, inundated areas could reach 3,514,403 ha by 2050, accounting for 89 per cent of the total area of the Cuu Long (Mekong) Delta, an increase of 20 per cent compared to floods that hit a record-high in 2000.

The institute said the flood season would begin earlier each year and last longer than previous seasons.

This will result in serious damage to food and aquatic-product production and affect the area's ecology as well as people's livelihoods.

According to the National Centre for Hydro-Meteorological Forecasting, the Cuu Long (Mekong) Delta suffers from many floods every year. Compared to previous years, the floods this year were of a more serious nature.



A stretch of riverbank in Long Phuong Village in southern Dong Thap Province that has been eroded 40 metres inland by landslips caused by floods and high tides. Weather forecast must improve in the Mekong Delta for the region to better cope with floods and high tides.

World Bank approves country strategy

The World Bank Group's Board of Executive Directors has discussed the Viet Nam Country Partnership Strategy (CPS) for the 2012-16 period and approved the first three operations under the new CPS, delivering commitment to support its transition to a successful middle income country.

Victoria Kwakwa, Country Director for the World Bank in Viet Nam, said that the World Bank Group's first CPS with Viet Nam since it became a lower middle-income country in 2009 would combine continuity from the previous CPS programme with the introduction of some gradual strategic shifts aimed at sharpening strategic focus within the programme, enhancing operational efficiency, and delivering development results faster.

Besides outlining Viet Nam's key development achievements, the CPS also highlighted remaining challenges, including maintaining high levels of growth with macroeconomic stability, strengthening economic competitiveness, managing the environment and natural resources and tackling persistent poverty in remote communities.

The CPS was expected to help Viet Nam address these challenges and implement the Government's Socio-economic Development Strategy during the next 10 years.

It would support investment, programmes and advisory services organised into a strategic framework of three key pillars and three cross-cutting themes.

The pillars are to increase the country's competitiveness, sustainability of its development and access to social and economic opportunities. The cross-cutting themes are to strengthen governance, promote gender equality and improve resilience in the face of external economic shocks, natural hazards and the impacts of climate change.

The World Bank has provided nearly US\$14 billion in credit, loans and grants to help Viet Nam sustain growth and fight poverty since 1993.

The International Development Association (IDA), the World Bank's concessional arm, will allocate about \$4.2 billion to support Viet Nam during the new CPS period.

On December 15, the World Bank's Board of Executive Directors approved three operations worth total \$457 million in IDA credits to help Viet Nam implement three development projects in poverty reduction, urban infrastructure services and rural transport.

Germany pledges \$372m in ODA

The Federal Republic of Germany has pledged official development assistance (ODA) of more than US\$372 million to Viet Nam during the next two years – the biggest sum yet allocated.

The announcement was made at a press conference held by the German Embassy in Ha Noi yesterday after representatives from both countries concluded two-day negotiations on development co-operation.

German Ambassador Claus Wunderlich said Germany expected to further the bilateral co-operation, adding that Viet Nam was the most significant country receiving ODA from Germany in South-east Asia.

Of the assistance, nearly \$1.3 million will be spent on repairing flood damage and enhancing flood protection in the Cuu Long (Mekong) Delta.

According to Vest Brunhilde from the German Ministry of Economic Co-operation and Development, assistance will cover vocational training, environment, especially climate change response, and health care.

She said Germany was also ready to share its climate change experiences with Viet Nam. In addition, support would be given to develop Lilama 2 Vocational Training to raise the quality of human resources.

Health-care related projects would aim at making health services more accessible to the poor in disadvantaged localities in Yen Bai, Thai Binh, Thanh Hoa and Phu Yen provinces.

The development of clean energies would also be a focus.

The Germany-Viet Nam Joint Statement, issued last year, marked the enhancement of a relationship that was re-established in 1990.

Up to September 2011, Germany poured a total investment of \$977 million into Viet Nam, ranking 24th out of more than 90 foreign investors.

Climate change gains focus at Durban meeting

Global support to aid Viet Nam with issues related to climate change was affirmed during bilateral meetings between Viet Nam and other countries and international organisations during the 17th Conference of the Parties (COP17) in Durban, South Africa.

This sentiment was revealed by Tran Thi Minh Ha, head of the Department of International Co-operation at a press briefing held by the Ministry of Natural Resources and Environment (MONRE) in Ha Noi yesterday. The briefing presented information on the results of Viet Nam's activities between November 28 and December 11 at COP17, which was held at the same time as the 7th Session of the Conference of the Parties (CMP7) to the Kyoto Protocol.

MONRE highlighted that during a working session between the Vietnamese delegation and the United Nations Environment Programme (UNEP), UNEP said it was willing to offer Viet Nam non-refundable aid along with technical support to prepare the country's third national report on climate change by 2012.

The Vietnamese delegation also had bilateral meetings with representatives of several countries, including the United States, Australia, Japan, Sweden and Finland to discuss co-operation in climate change issues. Among the issues discussed were the launch of a clean development mechanism project with Sweden and co-operation in the low emission development strategies with the United States.

Ha said the meetings achieved positive results.

MONRE also noted a conference on nationally appropriate mitigation measures (NAMAs) held for developing countries by the European Union, where Viet Nam and Peru were selected to be the two pilot countries in Asia and America, the locations of these measures.

The ministry said it would submit a plan to implement activities following the results of COP17 and CMP7 to the Prime Minister in a timely manner.

Climate response lacks resources

Insufficient human resources was a major challenge for Viet Nam in responding to climate change, said head of the Natural Resources and Environment Ministry's Personnel and Organisation Department Ta Dinh Thi.

Thi said that although Viet Nam launched its first National Target Programme to respond to climate change in 2008, the biggest difficulty in its implementation lied in a shortage of staff specialising in the climate change-related sector at all levels.

Most staff working in the sector had been trained in other fields and were assigned to do other tasks at the same time.

At present, there are nearly 50,000 people working in administrative and research institutions belonging to the natural resources and environment sector, but more than half of them work in the land management sub-sector, with only 1 per cent focused on tackling climate change.

"Preparing human resources in the climate change sector is an urgent task, especially at local levels," said the deputy director of Viet Nam's Institute of Meteorology, Hydrology and Environment, Tran Hong Thai.

On average, each province needed at least 10 trained personnel, he said, adding that there was an absence of people who specialised in climate change management at the provincial level.

Thai said that roughly 700 districts and 9,000 communes also required staff that specialised in climate change.

He said that it took about 15 years to train an expert in climate change, including conducting research and accumulating experience. Meanwhile, developing human resources was a basic foundation to implementing tasks under the national target programme.

Professor Mai Trong Nhuan, director of the National University said that climate change was a multi-sectoral study, relating to fields including meteorology, hydrology, geology, biology and environment management, so it was necessary to mobilise joint efforts from lecturers and experts in different fields.

Short-term measures and training courses to improve public understanding had proved effective during the past.

Thi said that the ministry was developing human resources for the sector to meet the demand.

However, there are no universities in Viet Nam that run climate change courses, but is expected by 2015 that it will be part of the training programme.

Earlier this month, Prime Minister Nguyen Tan Dung approved a national strategy to respond to climate change which also put human resource development as a priority.

Viet Nam is one of the five countries most vulnerable to the impacts of climate change. In the past 10 years, natural disasters have claimed the deaths of over 9,500 people each year.

Vietnam still doesn't have regulations to treat electronics waste

Though the hazard from electronics waste has been warned for the last many years, the management and treatment of electronics waste in Vietnam have not made any considerable progress.

Peter Hofbauer from German BiPro Munich said on the workshop discussing the management of chemicals and how to comply with international regulations on December 8, that the electronics waste in Vietnam has been increasing at an alarming level.

Electronic waste comes from three main sources, from electronics enterprises in Vietnam, the imports and from household use.

The environment pollution has become the top concern in the world, while environmentalists have called on to take actions to protect the green planet. If typing "bao ve moi truong" (protect the environment), one would find 36,700,000 results just within second.

However, the call to protect the environment seems not to bring the desired effects. While domestic waste only brings pollution and diseases, technology waste always have latent risks which can bring serious consequences.

In Vietnam, millions of tons of technology imports go through seaports and border gates every year. These include a big volume of backward and substandard products, and a half of which may be thrown into rubbish dump.

Tran Quang Hung, Deputy Secretary General of the Vietnam Electronics Industry Association VEIA, said that in 2011, there are 400 electronics enterprises, including 100 foreign ones, which specialize in assembling electronic products with electronics parts imported from other countries. However, Hung thinks that the electronics waste from this source is not too big, while the majority of waste from the other two sources.

Hung said that in Vietnam, most of the electronics waste, such as electrical home appliances, audio-visual products, electronic toys, telecommunications, medical electronics ..., all have the toxic chemicals which harm the nervous system, or cause lung cancer. The substances could be lead (in components, cables ...), cadmium (in batteries, capacitors, transformers ...), mercury (in TV tubes LCD, Plasma ...), and chromium 6 in coating layers, PBB and PBDE (the chemicals listed in the RoHS list issued by the EU in 2003)

However, to date, a lot of problems still exist in dealing and treating the chemicals in Vietnam, while Vietnamese have not done much to upgrade their living environment.

Despite the great efforts to settle the problems, management agencies have been still struggling in deadlock, because they still have not built up concrete regulations on electronics waste. Only in August 2011, did the Ministry of Industry and Trade issue a circular with temporary regulations on the limits of the contents for some hazardous chemicals in electrical and electronic products. Meanwhile, the Ministry of Natural Resources and the Environment is still compiling the regulations on collecting electronics waste.

In other countries, the concept of "car cemetery" or "electronics dump" has become more popular. These are the places where refused products are gathered and wait for the day they can be recycled. Meanwhile, in Vietnam, there is no electronics waste treatment factory, even though a lot of foreign investors want to come to Vietnam to set up factories.

The problem is that the foreign investors want to import waste from other countries gather enough waste to run the factories at full capacity. Meanwhile, the proposal has not been accepted. According to Hung, the ones who collect electronics waste are scrap iron dealers.

The people consider the waste manually with no specific machines, and then classify equipments to resell to recycling workshops. This is the work that may cause the environment pollution.

Therefore, while still waiting for feasible measures to treat electronics waste to come out, and while Vietnam still is not capable enough to build electronics waste treatment factories, the State, for the immediate time, needs to set up regulations to control the scrap iron dealers, guiding them to classify equipments in a scientific way.

Mineral survey takes priority in new strategy

Prime Minister Nguyen Tan Dung has ratified the country's mineral resources strategy for 2020 with a vision to 2030.

Under the strategy, investment priority will be given to conducting basic geological surveys on land and at sea to estimate the country's mineral resources.

Exploration and extraction will be closely associated with processing and efficient use of the resources.

The overall objective of the strategy is to combine the sustainable extraction of resources with processing in order to produce products with high economic value.

Viet Nam targets to terminate the production of all small mineral processing facilities and technology which causes pollution and results in low economic efficiency by 2020.

It also resolves to export only processed mineral resources of high value after 2020.

Key resources that the country wants to focus on are peat in the Hong (Red) River Delta; bauxite and laterite in the Central Highlands; rare earth and zinc in the northwestern region, Viet Bac and central region; lithium and gold in the central part and light-coloured granite in the north.

For coal exploration and mining, work will be conducted 300m below the Quang Ninh, Thai Nguyen and Quang Nam coal basins. For mining in the Red River delta, the strategy asks for the best options to ensure negative impacts on socio-economic development are minimised while protecting the environment.

Gold mining will continue to be carried out in existing mines but only advanced technologies will be permitted.

The Prime Minister has adopted an action programme to turn the strategy into reality.

The key objective of the programme is to define tasks for central and local government agencies in their execution of Resolution 02-NQ/TW on the strategic orientation for mining and the mineral resources industry by 2020 with a vision 2030.

Under the programme, popularisation of the Law on Mineral Resources will be conducted; the enforcement and effectiveness of the state management on mineral resources strengthened; mechanisms and policies in the field of mineral resources renewed; and the mineral resources industry developed.

The Government has assigned specific tasks to each ministry. By late March 2012, the Ministry of Natural Resources and Environment must complete a guiding document to implement the Law on Mineral Resources and the decree on tendering the rights to extracting minerals.

The Ministry of Home Affairs has been assigned with the task of completing the organisational structure on State management from central to local governments, including human resources development.

Discharged wastewater adds to Sai Gon River pollution

The Sai Gon River and other rivers in HCM City have become more polluted because of increasing levels of waste-water from household and industrial waste.

The coliform bacteria in the rivers has exceeded permitted levels, according to research results released at a meeting of the city's Department of Natural Resources and Environment last week.

The water-quality tests at 11 of 16 water-observation stations do not meet standard levels.

Besides wastewater from industrial production, other pollutants come from sewage systems and garbage dumps as well as mining, farming and husbandry activities.

Water leakage from household-septic tanks and illegally discharged household waste-water are also polluting the rivers.

About 80 per cent of the city's households use septic tanks, with water leakage from the tanks polluting nearly half of the of the city's underground water volume.

Experts have recommended that the city build a new urban sewage system and underground-water observation system.

Nguyen Van Phuoc, deputy head of the department, said several measures would be carried out to protect water quality of the Sai Gon and Dong Nai rivers.

The department is working with the provinces of Tay Ninh, Binh Duong, Dong Nai and Ba Ria-Vung Tau to conduct a survey of companies' waste water discharge that is illegally released into the two rivers, both of which supply water for the city.

Based on the data, violators would be fined or penalised.

The department had also completed inspection of companies that had released more than 50cu.m of waste water into the Sai Gon River, Phuoc said.

Of the 450 inspected companies, 269 companies do not have a waste water treatment system.

The department had also asked the affected provinces to divide the river into zones to receive wastewater.

Under the measure, companies that cause pollution will not be allowed to operate on the river's upper stream areas or in areas that are sources of tap water.