

PREPAID BROADBAND
Philippines mobile carrier Smart offers pre-paid data-only SIM cards

MALAYSIA
Tech association urges lowering of broadband fees

GREEN TELECOM
The latest issue of our sustainable tech supplement attached

COMMSDAY

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Non-voice revenue gaining at Chinese telcos as subscriber losses mount

Non-voice services, in particular broadband and related value-added services, are replacing traditional fixed line and voice services as major revenue generators for China's two state-owned fixed line telecommunications carriers, China Telecom and China Netcom.

The two companies, both listed in Hong Kong and New York, yesterday released operational data for the first three months of 2008. Both sets of results reflect the predominant trend in the Chinese fixed telecoms market, with the decline in local access lines – as a result of mobile substitution – accelerating but offset by steady growth of higher-ARPU broadband subscribers.

Both operators registered slight increases in revenue for the quarter with CT reporting revenues of RMB 44,160 million, a 1.6% increase over the same period a year earlier, and CNC's revenues at RMB 20,487 million for an increase of 0.85% y-o-y.

As of end-March 2008, the two operators had a combined broadband subscriber base of 59.4 million (CT: 37.7m, CNC: 21.7m) with a combined 4 million in new adds.

CNC managed to gain a net increase in subscribers for the quarter as new broadband accounts of 1.9m outpaced the number of local access lines lost of 1.7m. Meanwhile, CT lost 3.2m local access lines compared to its broadband gains of 2.1m for a net decline of 1.1m accounts.

The figures show an accelerated decline in traditional fixed line accounts for both operators. New additions in this category for CT went from 0.71m new user adds in Q2'07 to losses of 1.05m and 3.1m accounts in the last two quarters of 2007. Similarly, CNC reported a gain of 1.1m new local access accounts for Q2'07, which dropped to 0.5m new adds in Q3'07, and reversing to a loss of 3.2m in Q4'07.

2008 DECLINE? While both operators registered a net gain in user accounts in 2007 as net broadband adds outpaced net losses in legacy users in the latter half of the year, the latest figures indicate that 2008 will not be the same. There is a clear trend that the number of total subscribers for both operators will decline as losses accelerate while broadband growth remains at its present, steady pace. To address the decline in user numbers, China Telecom says it is now focusing on more profitable parts of its voice business.

“The Group concentrated its sales resources and tilted its resource allocation towards the key customer segments of government and enterprise as well as mid-to-high-end household while strictly controlling sales initiatives for the low-end customers,” CT said in a statement.

Meanwhile, the growth in broadband users should continue to maintain CT's revenue topline. China Telecom's broadband ARPU for 2007 was RMB80, up from RMB77 in 2006, and nearly double the operator's ARPU from voice subscribers of RMB41.80, according to an April presentation to Credit Suisse by Wu Audi, CT executive director, EVP and CFO.

And while local voice revenues made up 40.1% of the operator's revenue in 2007, non-voice revenue (Internet access, VAS and Managed Data) now account for 36.5% of the topline figure.

The same story is offered by China Netcom, which is also banking on broadband and related services for growth.

“Leveraging the rapidly growing subscriber base, the company actively promoted the broadband content and applications services to boost the demand of broadband subscribers in order to increase the contribution of the broadband content and applications services to the total revenue,” China Netcom said. “Particularly, the company actively developed such applications as video monitoring service and network information security service.”

Zhang Chunjiang, chairman of China Netcom, said, “The demand for informationization (sic) will keep growing as the Beijing Olympics approaches. The Company will seize the opportunity by expanding innovative businesses and consolidating the traditional voice businesses, with an aim of achieving exponential growth in innovative businesses and repositioning "Family 1+" as multimedia information services for residential customers.”

Tony Chan

Malaysia's Pikom urges lower broadband fees

The Association of Computers and Multimedia Industry of Malaysia (Pikom) has been keen on lowering fixed broadband rate for home users as the tech association has proposed monthly Internet broadband fees to be lowered to RM10 for 50 hours of usage, reported the Business Times Online.

Pikom chairman David Wong Nan Fay said that the most subscribed broadband packages currently cost from about RM50 to RM60 a month for unlimited usage and lowering these rates would help extend the nation's broadband to reach 50 percent of Malaysian households.

“We have 1.37 million people in the country using broadband. This amounts to only 15.5% of total households in Malaysia,” he said.

“The cost of broadband connection has been a significant issue teemed with the fact that most service providers are currently only offering best-effort service to broadband customers in Malaysia,” Wong added.

The slow uptake of broadband services has led the Malaysian government to revise its earlier optimistic penetration targets, prompting industry observers to call for market reform last year. The government had previously set a target of 75 percent adoption rate by 2010, but in 2007 only 11.7 percent of 5.5 million households was reported to have broadband access, up from seven percent in 2005, said the report.

Pikom's proposal would be submitted to the International Trade and Industry Ministry on Monday. “A similar wish list will also be presented to the Ministry of Finance at a later date,” he added.

“The move will promote broadband usage and at the same time make people more ICT-savvy,” Wong told reporters.

“Pikom feels it is necessary for the government to directly intervene and lower the cost of broadband subscription to make it more affordable to the average Malaysian and not merely making the hardware cheaper.”

Chief Minister Lim Guan Eng said the state government supported Pikom's proposal to fix the broadband rate at RM10 and that it was keen to work with Pikom to boost the state's ICT industry.

Moreover, Wong announced earlier that Pikom would set up five state chapters to drive the association's efforts in the northern, southern and east coast regions as well as Sabah and Sarawak.

“The chapters will be chaired by our representatives who will act as our liaisons with state governments,” he said.



Pamela Perez

Philippines' Smart flies prepaid broadband

SingTel unit Smart Communications has launched the first prepaid broadband service in the Philippines thru its Smart Bro promo, reported Mobile Phone Nation

The new service has been hailed as a means to bridge the digital divide in the Philippines, a country where only 5 percent of households have internet access, making internet connectivity

available for the 'masses'.

According to tech blog Talkin' Tech, Smart had previously made available a portable solution to their broadband service via a USB modem, but this time around, this new service makes use of a prepaid SIM that can easily be loaded just like a regular SIM—albeit for dedicated for data transmissions only. It also makes use of the existing 3G network and rates are similar to data calls made which is Php10 per 30 minute.

The service also makes use of a wireless broadband receiver which has the size of a credit card and a USB that connects the receiver to a laptop or desktop pc, which comes with Smart's prepaid broadband kit worth Php4,500.

The kit also includes free 40 internet hours every month with a maximum speed of 385kbps; a USB dongle, a 3G enabled Smart SIM card and.

However, mixed sentiments have been aired on the new service, which are mainly on the fact that it wasn't much of a difference to having a 3G-enabled phone. In an Inquirer blog's comments, Allan David Reyes said that amongst the legitimate issues Smart has to address, "One of the more interesting points that was raised is the use of 3G enabled phones. If you're already using one that's 3G capable, you don't really need to buy Smart Bro's modem since you can use your phone as one. This will save you money, plus the fact that you don't have to carry two devices that more or less does the same thing."

Apparently, the kit's modem is just the same as a 3G-capable mobile phone, which can also be used as modem when connected to a computer.

Nevertheless, the Smart Bro prepaid broadband allows Filipino internet users to take control of usage as it comes in a time when Filipinos are turning to the Internet for various purposes, said Mobile Phone Nation.

Also, the availability of this new prepaid service is indeed helpful in making the internet accessible to more people.

Pamela Perez

Asia's pay-TV set to gain \$86bn by 2012, says ABI

Asian digital pay-TV will take in US\$86 billion of total revenues by 2012, growing 11 percent a year over the next 5 years from US\$53 billion in 2007, according to a study by Hong Kong-based research house Media Partners Asia.

The report, 'Asia Pacific Pay TV and Broadband Markets 2008,' suggests that 17 percent of pay-TV households in Asia subscribed to digital services in 2007, implying a subscriber base of almost 48 million, which could scale up to 218 million by 2012 and 298 million by 2017. At the same time, digital pay-TV penetration of TV homes will grow from 7 percent in 2007 to reach 28 percent by 2012 and 36 percent by 2017, reported Variety.

"Big gains are likely to be realized from digital pay TV and next-generation broadband with the build-out of fiber and advanced cable networks," said MPA boss Vivek Couto.

However, the more interesting finding is that best prospects are to be found in two territories that are already well developed, Japan and Korea, as well as the huge, but risky Indian market. The two will remain key markets, boosted by the growth of digital cable and IPTV services as well as the growing demand for on-demand, high definition and personalized TV services.

The report also said that biggest digital growth may come from China and India. "Penetration levels will peak in Korea, Japan, Taiwan and developed markets, while China will lead emerging markets. In terms of size, China will remain the largest market for broadband in the region with close to 195 million broadband users by 2017."

But it suggests that India will have more impact for pay TV distributors and content suppliers as China sticks more closely to cable TV and free TV models.

"We highlight risk and reward throughout Asia, especially in India, where global majors have entered into large-scale investment joint ventures with domestic broadcast media groups," Couto said. "There remains scope for profitable growth in Korea and Japan, partially offset by regulatory and commercial barriers."

"Korea will become increasingly important due to the emergence of a large market for pay TV

advertising and the growth of digital pay TV. Indonesia should emerge as a significant opportunity because of the growth of satellite. We also maintain a positive outlook on Australasia, Malaysia and Hong Kong.”

MPA has forecasted “consumer demand for higher broadband speeds, greater connectivity and new applications will overtake demand for low prices, especially in developed broadband markets.”

On mobile TV, MPA said that subscriber growth was boosted last year by platforms using free and pay models in Asia’s two largest markets for mobile TV, Korea and Japan, as well as new roll-outs in Malaysia, the Philippines and Vietnam. Meanwhile, new launches are expected this year in China, India, Indonesia, Singapore and Taiwan, reported the Asia Media Journal.

However, operators of mobile TV services are struggling, constrained by regulatory and commercial barriers, with business models incorporating a mix of both free and paid services increasingly seen as critical to profitability and growth.

In Japan and Korea, existing business models for mobile TV remain unprofitable. Japanese broadcasting regulations prohibit advertisers from generating profit and restrict content developers from producing exclusive programs for mobile.

Similarly, government regulation is limiting opportunities to generate advertising revenue in Korea, while a subscription-based mobile TV operator, TU Media, is experiencing substantial losses because of competition from free services, said the report.

Pamela Perez

Korea’s Hanaro ups capacity with Juniper

Korea’s Hanaro Telecom has increased capacity with Juniper Networks T-series, driven by increased subscriber demand for IPTV and other multi-play services, according to a press release.

All Juniper Networks T-series routers leverage JUNOS, a single source operating system that enables consistent operations, network scale without disruption, and unprecedented interoperability and service agility.

“South Korea’s adoption of advanced IP services such as IPTV continues to grow at an impressive rate,” said Tim Kang, Juniper’s vice president of Korea.

“Service providers such as Hanaro Telecom require a clear path to scalability, with minimal service interruption, overhead, or capital outlay. We are pleased to provide Hanaro with a service-enabling network infrastructure based on the T-series that helps expand and accelerate service model innovation, fueling business growth,” he said.

Bongki Kang of Hanaro’s Backbone Network team said, “We are leveraging the rich feature set of JUNOS and the high performance of the T640 chassis to address growing traffic demand.”

“The T-series router’s inherent reliability, and ability to scale seamlessly, gives us the confidence that we will meet our customers’ increasing demand for innovative new services,” he added.

Pamela Perez

WCDMA patent owner group lowers fees on volume projections

A group of companies that hold patents for WCDMA will lower their royalty charges as much as 66% for licensees.

According to a report by EE Times, PlatformWCDMA Ltd, whose members include Siemens, NTT, NTT DoCoMo, NEC, SK Telecom, France Telecom, Mitsubishi and Fujitsu, will now charge between \$1 and \$2 for each WCDMA terminal product for new licensees and \$1 for licensees that have been licensed for two years or more.

“This is a substantial and enormous reduction, about 33 percent for first time licensors and 66 percent for longer term users. It sets the benchmark for the rest of the companies holding essential IPR for W-CDMA terminals,” Brian Kearsey, a director at 3G Licensing, the administrator of the licensing programme for PlatformWCDMA, told EE Times Europe.

The announcement does not include royalty licenses by the three key patent holders of the WCDMA, Qualcomm, Nokia and Ericsson, who charges as much as 5% of the net selling price of 3G terminals for use of their patents, the report said.

Kearsey says that license fee reduction was initiated in part because volumes of WCDMA devices are expected to expand significantly.

“One of the reasons we could reach our agreement is because of the market forecasts for 3G and its evolutions,” said Kearsey. It is predicted the number of terminals will increase from about 85 million units now to perhaps 800 million by 2013, which includes data cards for PCs and embedded devices in computers for accessing wireless broadband.

“With those sorts of volumes, the licensors can afford to take something of a hit on royalties, particularly as the price of terminals and chips will reduce substantially and thus volumes increase.”

Meanwhile, PlatformWCDMA director and chairman, Hisashi Kato adds that the reduction is also aimed at alleviating the growing patent licensing costs for device makers.

“As recent 3G mobile terminals are increasingly developing in embedding music, moving pictures and even broadcast features in addition to voice communication, terminal manufacturers must comply with various standards, not merely WCDMA, but also video, speech, broadcast, and others,” Kato said. “The royalties payable to numerous patentees under these standards are expensively accumulating so that the competition in this market is intensifying to meet the demand of multi-functionalities of WCDMA terminals while manufacturers have to bear accumulative royalties.”

The announcement follows an announcement last week by major players, including Alcatel-Lucent, Ericsson, NEC, NextWave Wireless, Nokia, Nokia Siemens Networks and Sony Ericsson, but excluding Qualcomm, to cap licensing fees for LTE to a single digit percentage of the sale price of mobile phones and a single digit dollar amount for LTE in notebook computers.

Mobile search advertising and browser market set to surge

Mobile search advertising is set to expand from US\$813 million in 2008 to US\$5 billion by 2013, according to ABI Research, with Asia-Pacific region showing the greatest overall gains. In addition, the open-internet browser segment for mobile is set to grow from 76 million in 2007 to nearly 700 million browsers delivered in 2013.

The “Mobile Marketing and Advertising” study shows that the mobile search advertising growth will be driven by the growth of consumer options to search on-deck and off-deck, SMS, and via branded or white-label search providers in the mobile domain, with total SMS searches growing from 13 billion in 2008 to over 76 billion by 2013.

“The Mobile Browser Market” study claims that while a large number of phones today still use browsers with very limited web browsing capabilities, many smartphones are incorporating browsers that support the latest capabilities such as AJAX and RSS, as well as websites optimized for viewing on a mobile device.

“We are seeing strong growth of mobile search services within an on-portal and off-portal context,” said research director Michael Wolf. “However, given the constraints of mobile platforms and the specific needs of mobile users, mobile search services – and the integration of advertising – need to be thought out carefully by branded providers, white-label search vendors, and carriers.”

“The focus today for mobile browser developers is to take advantage of the latest web standards while also developing solutions tailored towards the unique experience of using a browser on a mobile phone,” said Wolf. “The most recent commercial solutions from Opera, Openwave and AC-CESS, as well as those using open source solutions such as Webkit, are targeted towards allowing consumers to access content on the web without limitations due to browser constraints.”

However, web usage on mobile devices has a significant distance to go in closing the gap with PC-based browsers, according to the study.

Sonia Han

PayPal blocks browsers

PayPal is gearing up to deny access to browsers that don't meet its encryption standards—including Safari and older versions of Internet Explorer. The decision is likely to create a public ruckus with Apple, which has refused to support Extended Validation SSL certificates or install a phishing filter. “In our view letting users view the PayPal site on one of these browsers is equal to a car manufacturer allowing drivers to buy one of their vehicles without seatbelts,” security honchos Michael Barrett and Dan Levy wrote in an internal white paper pushing for the ban.

As the financial transaction arm of auction giant eBay, PayPal is a prime phishing target. But it

remains to be seen whether officials will want to lose a “substantial set” of account holders should Apple continue its refusal to saddle Safari with anti-phishing technology many surfers say negatively impacts the browsing experience. For now, the company is putting the proposal on the table without the threat of a pre-determined cutoff date. “At PayPal, we are in the process of reimplementing controls which will first warn our customers when logging in to PayPal of those browsers that we consider unsafe. Later, we plan on blocking customers from accessing the site from the most unsafe—usually the oldest—browsers,” CIO Barrett wrote.

Bandwidth boom Mark II: 25 new cables on way

A global telecommunications researcher has released data indicating that swelling demand for international bandwidth is driving the construction of more than 25 new submarine cables worldwide over the next three years, with at least four coming directly to Australian shores. However, with the global cable rollout coming with a pricetag of around US\$6.4 billion, the report also cautions that the risk of costly losses for providers and carriers remains.

According to the latest update of TeleGeography’s ‘Global Bandwidth Research Service’, “the vast disparity between supply and demand that haunted the industry for half a decade has been erased,” following sustained demand sufficient to drive down the large quantities of unsold circuits that had previously built up after years of oversupply. As a result, says the report, new usage levels – the report cites a 1,000% growth in the number of households worldwide with access to broadband internet connectivity between 2001 and 2007 – have driven a compounded annual aggregation of 52% growth in demand for international bandwidth in the last five years.

The report comes after several weeks of announcements of new builds and upgrades in the ANZ submarine cable space, including the 160Gbps capacity upgrade to the Australian Japan Cable, Telstra’s collaboration with Alcatel-Lucent to land the Sydney end of a new Hawaii cable, Southern Cross’ 260Gbps enhancement, and Pipe Networks’ joint venture with Kordia on PPC-2.

The research highlights upgrades to existing network infrastructure as a popular answer to this growing demand, partly because of the availability of untapped dark fibre and additional wavelength. “The potential capacity of terrestrial networks is practically limitless,” notes the report, also pointing out that the cost of lighting long-haul DWDM capacity has fallen nearly 30% annually since 2001, and going on to say that less than 25% of potential capacity on major undersea routes has thus far been lit. However, it also points to a number of factors driving new submarine cable construction, including a need for physically diverse routes, a desire for wider restoration options and competitive requirements.

But the research also comes with a note of caution. It suggests that “the combination of falling prices for high-capacity circuits, the lower price per Mbps of capacity of these circuits, and growing demand for high-capacity circuits presents something of a dilemma for network operators” – because actual price per Mbps of capacity sold is dropping more quickly than actual circuit prices. And it highlights the issues for profitability when carriers are driven to make extensive investment into cable builds and network upgrades, while simultaneously facing customer expectation of lower and lower capacity prices. “Demand for bandwidth remains strong, but profits remain elusive... the latest telecom bubble will undoubtedly produce some winners, but the risk of losing, in spectacular fashion, remains,” warns the report.

Petroc Wilton

JAPAN FTTH BIGGER THAN DSL

Japanese FTTH connections have surpassed ADSL deployments for the first time, according to the Ministry of Internal Affairs and Communications. The number of households with fiber links rose four points year on year to 31.3% of the total in January, even as ADSL eroded nine points to 18.9% of all homes. Cable television lines now account for 16.6% of Internet connections. Ministry figures meanwhile reveal one in five youth subscribers employ filtering services on their handsets to block out objectionable mobile content.

> Aussie reseller sends 10% of billings to climate relief

> ECITA takes a detailed look at clean technologies

APRIL 21 2008: Green Telecom is a new fortnightly supplement with all CommsDay regional editions that highlights the move towards sustainable use of telecoms products and services. Editor: Tony Chan at tony@commsdaymail.com
More information can be found at <http://www.greentelecomlive.com>

The first green data haven: Iceland?

Sci-fi writer Neal Stephenson first wrote about data havens in his 1999 book, *Cryptonomicon*, which among other themes, featured a main protagonist who is building a large facility in South East Asia for storing the escalating amount of data in the world.

Then back in 2000, a 21-year-old MIT dropout named Ryan Lackey founded the world's first data haven on an abandoned WWII anti-aircraft platform six miles off the coast of Suffolk in the UK. While Lackey's HavenCo never did achieve much success due apparently to management and technical issues, it did attract customers and proved the concept of such facilities.

Now the Invest in Iceland Agency, a government-backed entity, seems to have caught onto the same idea. More importantly perhaps, it seems it has covered all the key points in its marketing spiel.

Instead of providing a secure, dedicated facility for storing sensitive data, which it offers naturally due to its remoteness, Iceland points to two key assets that make it an ideal location – operating costs and availability of energy.

“Iceland's operating environment is competitive with leading countries in the industrial world,” an agency announcement said. “With its low tax structure, high education levels and competitive costs for skilled labor, land and electricity, Iceland is a strong candidate for businesses to short-list when seeking new locations for their international data center operations.”

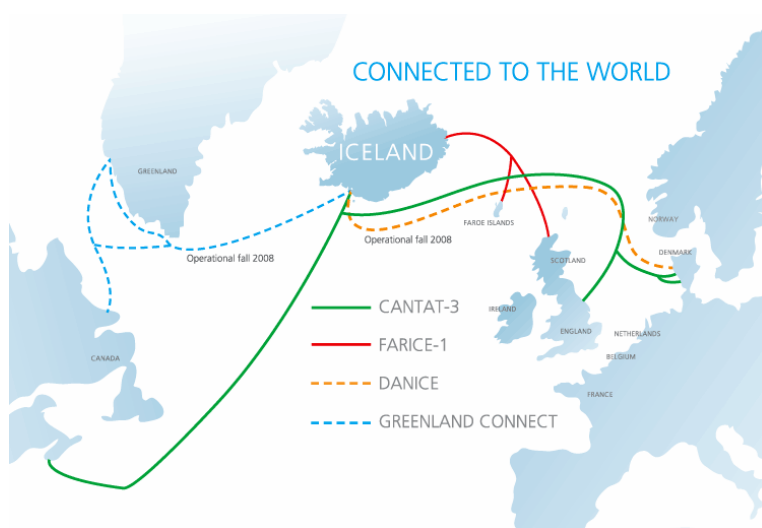
According to the agency, a benchmark survey by PricewaterhouseCoopers, Belgium puts the cost of operating a data centre Iceland below the UK, the US and even India.

“By almost any international comparative assessment focusing on IT competitiveness of the society and the IT use of the population, Iceland scores best in class,” PWC said. “Iceland provides a clear and attractive offer to the question where the power and cooling issue can be managed at attractive cost and without operational impacts in terms of growth and stability. With Iceland having plentiful supplies of low cost green power, cold air/water as well as hot water, the benefits to large data centre operators would soon pay back.”

One of the key requirements of any data haven is connectivity, and in this respect, the agency points out that at least two new cable systems will be coming online this year to link the country up to both Europe and North America.

Supplementing the country's two existing cable systems, Farice 1 (20Gbps, upgradeable to 720Gbps) linking to the UK and the Faroe Islands, and CANTAT 3 (5Gbps upgradeable to 7.5Gbps) connecting Canada, the UK and Denmark, will be Danice linking Iceland with Denmark, and Greenland Connect linking the country to Greenland and Canada. The new cables will offer as much as 3.8Tbps of capacity into the country, the agency said.

ABUNDANT POWER: As asserted by PWC's report, Iceland also excels in the other critical quality necessary for locating large data centres – access to lots of power, preferable cheap power. In the case



of Iceland, there's a lot of power and more still untapped and as a bonus, its green and emission free. "Iceland is the only country in Western Europe that still has large resources of competitively priced hydroelectric power and geothermal energy remaining to be harnessed," the agency said. "Only a fraction of the country's energy potential has been tapped and it is the only western country that produces all its electricity from emission-free and sustainable natural resources"

That's not all. The agency says that Iceland's remote, yet strategic (being in the middle between North America and Europe) location, makes it the ideal data centre site, especially those for disaster recovery, for companies that operate in both markets. Its remoteness also reduces political risks, according to the agency, who points out that the country has no military and has never actively engaged in war with other nations.

Other features that make Iceland the ideal data haven include a low land and housing cost, high computer literacy and an ample supply of IT skills, reliable domestic communications infrastructure, an open regulatory environment, low corruption and crime rates, and the second lowest corporate tax in the OECD at 15%.

According to the government, two technical parks have been under development and serve as potential sites for new data centres. The University of Iceland has planned a technical (science) park in central Reykjavik at a site next to the campus. The complex is a construction of 540,000 square feet (50,000 m²) of space to rent in 14 buildings that are linked with hallways. The second technical park is under development by a dedicated project. The site under development is 200 acres (80 ha) and is centrally located within the capital area. When fully built the complex is expected to have 2.3 million square feet of building space, or 220,000 m². On the site there will be parking space for 8-9 thousand cars.

Green Mobiles reallocates 10% of billings for the climate

Australia's M2 Telecommunications, a reseller of Optus' mobile network services, is looking for strategic alliance partners to further expand its Green Mobiles-branded product to environmentally conscious consumers. Green Mobiles, launched in September 2007, promises customers a 10% donation towards purchasing carbon offsets for every dollar they spend with the company. Unlike many other "green" products, the 'green' component of the service is not charged as an add-on, or a premium, of the Green Mobiles service, but as part of the standard pricing package.

"We can, by running with a no-infrastructure and low-overhead model, afford to give 10% away off the top basically as the incentive for the customer to join us," Vaughan Bowen, CEO and managing director of M2 Telecommunications told Green Telecom. Instead of rebating the money back to the customer, Green Mobiles uses it to buy carbon abatements on behalf of the customers. "The way we have structured the offer, it will not cost them (customers) any more, so they are not paying a premium and they are doing something positive for the environment. So it's not much to think about, as they say in America, it's a no-brainer."

CARBON CREDIT PURCHASE: This 10% from Green Mobile's revenue goes to purchasing carbon credits on the Australian Climate Exchange in the form of Greenhouse Friendly Approved Abatement or selected NSW Greenhouse Gas Abatement Certificates and the transactions are audited annually. According to Green Mobiles, a 10% contribution to green credits on an average cap plan of \$49/month offsets approximately 7 tonnes of carbon dioxide, equivalent to almost two standard motor vehicles, or the total electricity usage of the average Australian household for one year, or a return flight from Australia to Los Angeles.

"The money that we are giving the environment is not money that is out of some manufactured profit figure, it is off the top line, which is undisputable, and is audited specifically every year by Ernst & Young," Bowen said. "So we actually have a dedicated sub-audit – we are audited as a public company of course twice a year – but we have an annual audit specifically to audit the fact that we are actually buying the carbon abatement that we are promising that we are buying for our customers, and that we are extinguishing those abatements, so we can't resell them and get our money back. So we have evidence to our customers and the market that we are in fact doing what we said we were going to do, and not just using it as a good marketing tool."

He adds: "Our main proposition is actually proactive environmentalism, not offsetting the carbon emissions by the mobile phone. It is about using the mobile phone spend – people spend A\$37 billion



a year on telecommunications in Australia – so what we are trying to do is reallocate some of the investment that people are making on their telecommunications spend into the carbon abatement industry.”

NEW MARKETING PUSH: Green Mobiles is now ready to move beyond its soft launch stage, Bowen said, which consisted primarily of a promotion on the company’s Web site. But instead of launching the product through traditional marketing avenues, such as television, radio or opening shops, the company will adapt a partnership approach. The company is now seeking alliances across different industries to seek out green-minded consumers.

“The actual pro-active marketing phase for us is to finalize strategic alliance with large companies who have a green focus, for example, an energy company that has a big green focus. Our objective is to form an alliance with a company of that genre, we can then, with their support, communicate to their customers,” Bowen said.

“Basically, we know those customers are green minded, and in the case of an energy company who have 300,000 customers that have signed on to green energy, the next step for us is to work on an alliance marketing or affinity marketing basis, where we have a partner that is already taking the green proposition to its customers and then allowing them to go back with another green proposition and say ‘we’ve partnered with Green Mobiles because we know you care about the environment, here’s an offer specially from Green Mobiles to you. And because you are already a customer of us, you can have a further 5% discount, or you can have an extra 50 dollars to buy a phone or whatever the deal is.

He adds: “Green Mobiles will be presenting them with a deal that is better than what they can get if they went straight to our Web site because they are being rewarded for already being a green spender.” The company is now seeking expression-of-interests from energy companies, banking institutions, motoring associations, insurance companies, as alliance partners.

“We are focusing on companies that have made statements that they are green-minded, because we only want to partner with companies that have genuinely taken some form of green position,” Bowen added. “We are going through that process at the moment. We will find a partner in every category and those partners will communicate to their customers our offer – with a special sweetener for their customers.”

Green Mobile has also partnered with Australian recycling firm, Mobile Muster to help customers recycle old phones and the accessories.

Report highlights ICT technologies for climate change battle

A new report by the EICTA, the industry body representing the information and communications industry in Europe, highlights more than 25 different ICT technologies and applications that can improve the efficiencies and processes of other industries and sectors to reduce carbon emissions and energy consumption.

The report, titled High Tech: Low Carbon, also commits Europe’s digital technology industry to broad range of initiatives, including monitoring the carbon emission associated with its products and services, sharing best practices with their supply chain and developing low-carbon technologies.

SATELLITES A GREEN TECHNOLOGY?

Satellites are highlighted by the High Tech: Low Carbon report by the EICTA as one of the most efficient networking solutions in terms of reducing carbon emissions. “With access to sunshine reserves 1 billion times greater than those that reach the earth, space-related technologies are truly disruptive technologies that offer dramatic potential for replacing traditional terrestrial processes with low energy alternatives,” the report said, adding that there is scope for achieving orders of magnitude energy savings by switching to satellite technology to perform terrestrial network infrastructure tasks, particularly in the communications field.

“Broadcasting is a good example of this: all the current terrestrial TV broadcast systems across Europe together consume between 600 and 900 mW and release between 3 and 4.5 million tons of CO₂ per annum,” the report pointed out. “Three satellites could provide all of Europe’s TV in HD format and release nearly zero CO₂ into the atmosphere in the use phase. They are powered purely by sunlight. Even the uplink requirement is miniscule in comparison - far less than 1% of terrestrial demand. As satellite power and antenna size increase, future satellite systems (eg GEO and LEO) will also be able to provide broadband and mobile cost and performance comparable with terrestrial systems. They will provide a greener ICT network alternative for a wide range of service providers

“We believe that there are two interdependent solutions to the problem of overall CO2 emissions - product innovation by manufacturers and the intelligent use of digital technology by consumers, businesses and authorities” said Mark MacGann, Director General of EICTA.

THREE CATEGORIES OF TECHNOLOGIES: The technologies that can help the rest of the economy reduce their environmental impact are categorized into three areas: enhancing technologies, enabling technologies and transforming technologies.

Enhancing technologies improve existing processes and make them more efficient and includes monitoring and analysis tools, logistics applications, telematics, intelligent transport systems, driver assistance systems, smart buildings, building and energy management systems, LED lighting, and sensors that can optimise energy use of lighting, power sockets, and home appliances, the report said.

At the same time, the report highlights a list of enabling technologies that can change the way industries operate. Enabling technologies include energy-related applications that facilitate renewable generation, such as photovoltaics, and a whole series of technologies based on virtualisation, including in-silico testing and modelling, paperless office technologies, and electronic paper.

Lastly, the report explores transforming technologies that allow us to replace existing tasks with new applications and services, such as broadband, teleworking, homeshoring (or having call centre operators based at home and connected through sophisticated network management systems) and virtual call centres, virtual conferencing and virtual presence applications.

“Already, technology is helping businesses and individuals to do our everyday activities differently, replacing traditional, high impact processes with low carbon, low-impact alternatives which are integrated into everyday life at an unprecedented speed. Technology does not just change the way we do things. It changes what we do, creating whole new business models and stimulating innovation,” the report said. “But there are barriers to progress. Under current circumstances there is little incentive for individuals to seek out the most energy efficient products, or to change behaviour and adopt energy efficient lifestyles.”

EU ACTIONS: Meanwhile, Vivienne Redding, the EU Commissioner for the IT sector, said at the launch of the report, that the European Commission wants to explore voluntary agreements the industry to raise energy efficiency and to reach carbon neutrality before 2020.

“We all need to do our share of the job if we really want to achieve concrete results,” she said. “From my side, I have strengthened the efforts in research and am still working on a better exploitation of the opportunities available. I have made ICT for energy efficiency a priority in the part of Competitiveness Innovation Programme (CIP) under my responsibility and I have also proposed to increase by 48% the budget for ICT and energy efficiency in the ICT 2009-2010 work programme under the 7th EU Framework Programme for Research and Development (FP7), bringing it to 40 Mio€.”

KT makes green pledge, sees growth opportunity

Korea Telecom revealed a three-stage green management roadmap that will drive sustainability at the corporate level as well as explore growth opportunities with green solutions and renewable energy generation by 2012.

According to the Korea Times newspaper, KT's will adopt sustainability measures, raise awareness, secure eco-friendly technologies and adapt of international accords on climate change in 2008, followed by expansion of those efforts, securing budgets for green businesses and propagation of green management practices to partner firms in 2010.

By 2012, KT aims to be developing profitable green business models and introducing a corporate finance system based on sustainability.

“We have a social responsibility of adopting environment-friendly policies. But we are also preparing for it as a business opportunity.” Lee Woo-moon, director of KT's assets planning department, told the newspaper.

The report estimates that KT consumes about half a percent of the country's entire power production annually, or equivalent to an electricity bill of 140 billion won (US\$142 million). So far, KT has invested about 10 billion won in adopting eco-friendly or energy efficient equipment, which has resulted in a tax rebate of about 1 billion won from the government, the report said.

“Korea will be included in the Kyoto Protocol in 2009, so if we are not ready for it, we will be in a very difficult situation,” Lee said, adding that KT has already conducted internal research on its green status and is in the process of trying to join the Dow Jones Sustainability Index this year.