

STEEL FUTURES

STEEL PRODUCTS PRICES: IS THE STORM OVER?

SCNZ Manager Clark Hyland updated the recent Auckland Branch meeting of the New Zealand Institute of Quantity Surveyors, at the Ponsonby Cruising Club, on recent movements in steel product prices.

As a result of the recent global credit crunch demand for steel products has dropped significantly. US\$ international steel benchmark prices have subsequently declined substantially. Declines in the NZ\$ has so far offset much of this reduction in US\$ prices.

The sudden drop in world demand for steel followed what was termed a "perfect storm", which had developed globally since October 2007, driven by high demand and constrained steel production capacity. International US\$ benchmark prices peaked in October 2008 up approximately 70% from January 2008. International US\$ prices have since dropped back, availability has improved, production in some of the large Asian steel mills is being cut, and signs are that international benchmark prices may be reaching a floor.

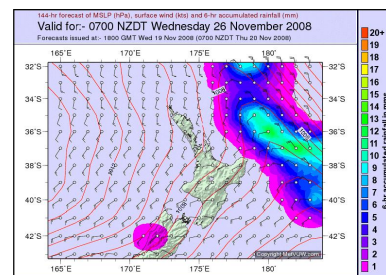
At the Metals Industry Conference in Auckland at the beginning of November, OneSteel Manufacturing's GM Sales & Marketing, Nick Fithall noted that over the past 3 months the NZ\$ declined substantially. "The rapid changes in foreign exchange and costs of credit have increased the cost of hedging and uncertainty in NZ\$ terms. This has put limitations on the ability to secure letters of credit and a decline in the US\$ purchasing power of credit lines established in NZ\$. The credit crunch is making it very difficult to expand credit lines, with significant premiums being required to do so. This likely to result in tighter credit terms being offered. There are also changing perceptions of risks with some international

producers insisting on partial pre-payments to secure order volumes. It is expected that there will be some moves from open account relationships, where they exist, to letters of credit which are more difficult to secure."

Nick Fithall observed that, while steel demand has dropped in the short term, it is expected that underlying long term growth trends will continue. In 2009 world steel consumption is expected to increase 1.5 – 2.5% or 20 - 40 mt. This is compared to increases of 50 – 100 mt each year since 2001. Emerging markets absorb nearly 70% of the world's growth in output, 36% of which is in China. China's GDP is still expected to grow by around 9% for 2009.

Continued GDP growth in Brazil, Russia, India, and China with a large population base and rapid urbanisation of China will continue to drive increasing steel intensity for the next 12 to 20 years in China and India.

In summary the "perfect storm" in global steel markets appears to be over. Steel supply constraints in New Zealand have eased, although recent falls in US\$ international steel benchmark prices have been largely offset to date by declines in the NZ\$. Local price changes will continue to be dependent on movements in the NZ\$ exchange rate & global supply and demand dynamics. Medium and long-term international demand for steel is forecast to remain strong and stable.



Storm clouds drifting away from NZ

SCNZ REWARDS AN A+ STUDENT

Every year SCNZ encourages fourth year engineering students at the University of Auckland to give serious consideration to a career in steel.

The lecturers draw up a list of likely candidates and the head of the engineering faculty decides who is going to win the \$500 SCNZ prize.

This year the top student in the course 411 Structures and Design 4 for 2008 was Kwan Yeung Chin. For four extensive assignments he scored 98%, and in the end of year examination, he scored 92%, achieving a very creditable A+ for the course.

Presenting Kwan Yeung Chin with the SCNZ certificate and cheque, SCNZ Manager Clark Hyland commended the young man on his achievement. "I am informed by members of the faculty that Kwan is a very conscientious student who asks many questions and at times has given the lecturer plenty to think about in his quest to have things clear. He has a bright future and we hope it will be in steel."



SCNZ Manager Clark Hyland with this year's winner of the SCNZ prize for the top student in fourth year engineering at the University of Auckland, Kwan Yeung Chin.

UPCOMING EVENTS

- 2008**
- December 10 & 11— EMS Training Courses** (Auckland)
- 2009**
- March 2-5—Steel in Architecture Evenings** (Auckland, Wellington, Christchurch, Queenstown)
- March 12—SCNZ Council Meeting**
- March 24-3 April— Steel Structures Seminar Series** (Taupo, Takapuna, Auckland, Wellington, Christchurch, Nelson)

IN THIS ISSUE

- EMS TRAINING COURSES 2
- STEEL STRUCTURES SEMINAR SERIES..... 2
- NEW SCNZ OFFICE HOLDERS..... 2
- STEEL IN ARCHITECTURE EVENINGS..... 3
- DZ 3404.1 STEEL STRUCTURES..... 3
- STEEL STRUCTURES LICENSING 4
- STEEL CONSTRUCTION TRAINING PATHWAYS 4

ENVIRONMENTAL MANAGEMENT SYSTEM TRAINING COURSES



The interest in sustainability and environmental performance will continue to grow. A credible environmental management system is the cornerstone of sustainable construction.

An effective Environmental Management System (EMS) will help you manage environmental risks and demonstrate your environmental credentials to builders, architects, engineers, developers, regulators and all your stake-holders.

Enviro-Mark will be presenting workshops to help businesses develop and implement an Environmental Management System.

The courses are offered to Enviro-Mark members at discounted rates and non-members are also welcome.

In the process of achieving the Enviro-Mark levels you can also sign off significant parts of the Sustainable Steel Construction

Charter which is benchmarked to the BCSA Sustainability Charter in the UK.

SCNZ endorses the Enviro-Mark programme and is offering a 50% course fee rebate to SCNZ members if you register for a Enviro-Mark course before 31 January 2009. Completing the courses will give you a means of setting up a recognised environmental management scheme, with the option to go for ISO 14001 certification at the end, if you wish to take it that far over a 12 month period.

Type this website address into your browser to go straight to the registration link:

www.landcareresearch.co.nz/services/sustainablesoc/enviromark/events.asp

Register now. Spaces limited!!



SCNZ STEEL STRUCTURES SEMINAR: SUMMER 2009 MOMENT RESISTING FRAMES & NZ53404

Preparations for a full day seminar for structural engineers (see below for dates and locations) are well underway.

Attendees will be shown how to apply the many useful features of NZS3404.1: Materials, Fabrication and Construction. The new standard will be offered at a special discounted rate.

The seminar will also cover other topics and these include:

- The analysis of moment resisting frames using the direct analysis method.
- Moment resisting frame connections including CHS collar joints, flange bolted and sliding hinge joints.
- Design of column panel zones in moment resisting connections.
- Deep rafter stability

The main presenters are: Clark Hyland, SCNZ Manager; Greg MacRae, Associate Professor of Canterbury University; Alistair

Fussell, SCNZ Senior Engineer; Kevin Cowie, SCNZ Engineer. Guest appearances will also include Raed El Sarraf, HERA, and Bruce Forbes, SCNZ Senior Engineer. At each seminar location, local fabricators will also present case studies.

This is a not to be missed seminar for structural engineers. Dates and locations are:

- 24 March 2009** – Taupo
 - 25 March 2009** – Takapuna
 - 26 March 2009** – Auckland
 - 31 March 2009** – Wellington
 - 1 April 2009** – Christchurch
 - 2 April 2009** – Nelson
- (Venues to be advised)

Note in your diary when the seminar will be nearest you, and watch this space for more information.

NEW SCNZ OFFICE HOLDERS

At the AGM on October 31, Evan Kroll of Stevenson's Structural Engineers (1978) Ltd was elected as the new SCNZ Chairman and Dave Munro of Fletcher Easysteel was elected Vice Chairman. Steve Stickland has been re-appointed Treasurer. Bob Hawley of Red Steel Ltd and Brendan Smith of OneSteel NZ Ltd were elected to the SCNZ Executive Council, with John Frear of OneSteel and Greg Jensen of Jensen Steel Fabricators Ltd standing down.

Evan is passionate about the structural steel sector and the work that SCNZ does to support it.

"I believe our association serves New Zealand well by promoting high standards of fabrication and erection, high standards in terms of both quality and safety. Requiring compliance with these standards is our country's best protection against the risks involved in importing pre-fabricated steel, as some developers have learned to their detriment.

"One of my objectives as Chairman is to see SCNZ drive up its steel constructor membership. The companies that fabricate the steel, usually from shop drawings that they produce themselves from the structural engineer's drawings, and then transport the steelwork to the project site and erect it, these companies contain our core competencies. Without them, we wouldn't have an industry. With more of them joining SCNZ and making sure they employ best practice, our industry will grow from strength to strength.

"That's why we need to set high standards for steel detailer qualifications and rigger qualifications to maintain the level of sophistication that our sector has achieved. It's no exaggeration to say that the key to survival in the current economic downturn is developing a workforce that has sustainable skills."



**The new SCNZ Chairman,
Evan Kroll
Stevenson's
Structural Engineers Ltd**



**Vice Chair,
Dave Munro
Fletcher Steel Ltd**



**Re-appointed SCNZ
Treasurer,
Steve Stickland
Corus NZ Ltd**



**New SCNZ Councillor,
Bob Hawley
Red Steel Ltd**



**New SCNZ Councillor,
Brendan Smith
OneSteel NZ Ltd**

DIARISE TO COME AND HEAR STEEL IN ARCHITECTURE

Peter Stutchbury is emerging as one of the leaders of a new generation of Australian architects. His buildings have received numerous architecture awards and are known internationally.

Peter was the first architect ever to win both the top National Architecture Awards from the Royal Australian Institute of Architects for residential and non-residential projects, and in June of this year, together with his colleague Richard Smith, was the



Peter Stutchbury (centre) with the team at Stutchbury and Pape

winner of the third International Iron and Steel Institute 'Living Steel' competition, taking the award for Extreme Climate Housing with their work at Cherepovets in

Russia. In September 2008 he participated in the New Zealand Architecture Master Class at Awaroa Lodge, and he has accepted an invitation from SCNZ to return and talk about his work to audiences in Auckland, Wellington and Christchurch. These talks will be held during the first week of March 2009, venues to be advised.

For SCNZ members interested in the residential use of steel, Peter has plenty of positive messages. So put the dates March 2 – 5 in your 2009 diary; you'll be inspired and uplifted by this man's vision.



Two of Peter Stutchbury's recent projects: the beach house and the outcrop house



DZ 3404.1 STEEL STRUCTURES – PART 1: MATERIALS, FABRICATION, AND CONSTRUCTION

Standards New Zealand has released a draft of DZ 3404.1 Steel structures – Part 1: Materials, fabrication, and construction for public comment.

Part 1 sets out minimum requirements for the selection of materials, corrosion protection systems, and the fabrication, erection and construction of steel structures. It applies to building structures, crane support girders, highway, railway and pedestrian bridges, and composite steel and concrete beams and columns. Users include architects, builders, building control authorities, building inspectors, coatings applicators, fabricators, regulators, steel distributors, steel constructors, and structural engineers.

The existing standard will be divided into seven Parts which will cover: materials, fabrication, and construction; structural analysis; general design of members and connections; design of composite members; design for fire; design for fatigue; and design for earthquakes. The first Part, NZS 3404.1:2009 *Steel structures – Part 1: Materials, Fabrication, and Construction*, will soon be published.

"Part 1 brings all the construction and fabrication material into a standalone document for users," says development committee chairman Clark Hyland, Manager, Steel Construction New Zealand Incorporated. "There was a real need to incorporate feedback from users, clarify good practice, and provide a body of commonly accepted knowledge.

"It is great working with Standards New Zealand, who bring a wealth of experience and expertise to the development process. Our development committee and Standards New Zealand project leader Jono East were fantastic. SCNZ staff Kevin Cowie, Bruce Forbes, Alistair Fussell and HERA's Raed El Sarraf and Stephen Hicks all made important contributions. The input of SCNZ steel

constructor members Bruce Mellsop, Wayne Carson, John Fredericksen, Malcolm Hammond, and steel producer member Geoff Verrill, was ably supplemented by architect Bradley Wynn, construction engineer Don Silvester, consulting engineers Barry Brown and Dave Cooke, and pre-caster Colin Beavis."

Significant new provisions have been added to Part 1, including:

- Selection of protective coatings for the New Zealand environment.
- A means of categorising the finishing requirements of architecturally exposed steelwork.
- Inspection of welding for earthquake resistant joints.
- Clarification of requirements for seismic grades of steel for earthquake applications.
- Clarification and expansion of tolerances, which are up to date with international Standards.
- Composite construction provisions.
- Special provisions for highway bridges and railway bridges.
- Some advisory recommendations for fabrication quality management systems.

It is intended that DBH will cite Part 1 in the Compliance Document for the New Zealand Building Code, Clause B1 Structure, Verification Method B1/VM1, and Clause B2 Durability, Acceptable Solution B2/AS1.

To make a formal comment on Part 1 or to be notified when revised Parts of NZS 3404 are published, visit www.standards.co.nz. For notifications, click on the 'Services' tab and select the 'Keep me up to date' service, or call the customer services team on 0800 782 632.

STEEL STRUCTURES LICENSING IN FINAL STAGES

Assessor guidelines are now being prepared by the Department of Building and Housing for the Steel Structures Licensed Building Practitioner rules. This follows a trial of the application process with a selection of senior steel construction supervisors around New Zealand. SCNZ member companies Manukau Welders in Manukau; Chapman Engineering in Christchurch; Jensen Steel fabricators in Tauranga, and MJH Engineering in Wellington participated.

The trial applications were evaluated by the Steel Structures LBP Focus Group, involving SCNZ member representatives, in the last

week of October, and adjustments have since been made to the application questionnaires. A further meeting is to be held on 11th December to finalise the forms and review the Assessor Guidelines. Voluntary licensing is due to commence in early 2009.

The Department of Building and Housing is looking for senior, experienced, perhaps semi-retired, people in the industry to help with the assessment of applicants on a part-time basis.

If you are interested please contact Clark Hyland at (09) 263 5635 or email clark.hyland@scnz.org.

STEEL CONSTRUCTION TRAINING PATHWAY

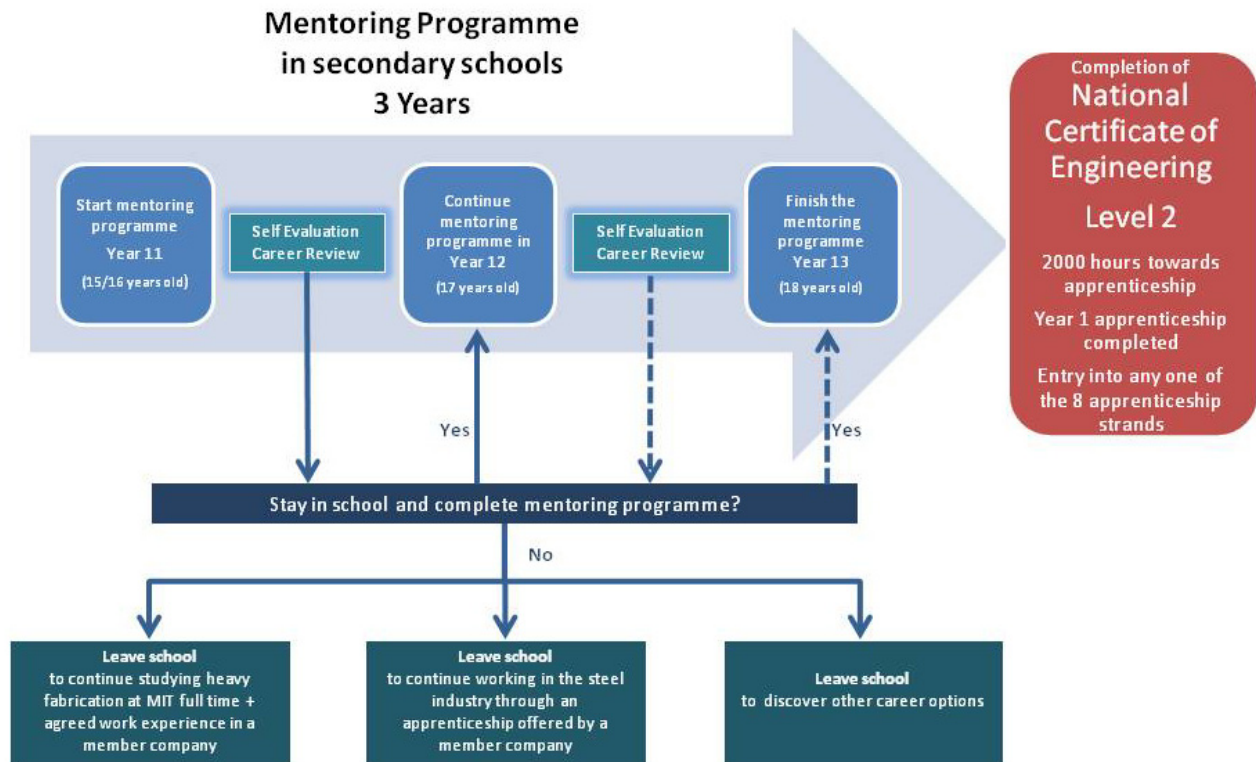
SCNZ Mentoring and Training Officer, John Kotoisuva, has successfully completed the first stage of his steel construction training pathway programme. Since July SCNZ has been piloting a scheme with high schools in Auckland in which students were signed up with an SCNZ member company and under took heavy fabrication training with Manukau Institute of Technology for one day a week for five weeks of a school semester. They then applied what they had learned, one day a week for five weeks with their host company. In the school semester break the trainees were provided paid employment for a week with the company.

At the review meeting over dinner at the Novotel Hotel, attending representatives of the 14 member companies involved unanimously endorsed the scheme and supported its roll-out in Auckland for a full year in 2009. Formal feedback from the schools, students and MIT shared the SCNZ member companies'

enthusiasm for John's efforts. It is clear a new pathway for high school students to cross into productive careers in Steel Construction has been formed.

In the last month John has started developing cluster groups of interested members, high schools and tertiary training providers in regional areas such Southland, Northland, Taranaki and Canterbury. The aim eventually is to set up a national programme adapted to the needs of both urban and regional members' needs, that will allow trainees to complete the first year of a heavy fabrication apprenticeship or 2000 hours of training while still at school. The response from those who have been involved is that it is a bold vision worth developing for the long term benefit of all.

If you would like to know more please contact John Kotoisuva on (09) 263 5635 or (021) 636 812, or email john.kotoisuva@scnz.org.



Want to know more? Just tick the box of the subject you would like more information about, add your details and fax back to 09 263 5638 and we will contact you.

- EMS Training Courses
- Steel Structures Seminars
- Steel in Architecture
- Steel Structures Licensing
- Steel Construction Training Pathways
- DZ 3404

Name:

Company:

Phone: