



## CPC2017 DESIGN WEEK

### OVERVIEW/SUMMARY REPORT

#### International Team deliver first ever Community Plumbing Challenge Design Week



An International Team comprising young Plumbers, Plumbing Engineers and Architects from Indonesia, Australia and the USA have successfully completed the first ever Community Plumbing Challenge Design Week, marking the beginning of the Community Plumbing Challenge 2017 program (CPC2017) in Cikarang, Bekasi (West Java), Indonesia.

From 31 July to 3 August 2017, the group were welcomed to Sekolah Dasar Negeri (SDN; 'Public Elementary School') Cicau 02 in Cicau Village, Cikarang, where they completed a surveying and design process over four days in full consultation with school management and with further input from teachers and schoolchildren. A sustainable upgrade solution for water supply, wastewater and handwashing at the school was the objective of this collaboration. This ongoing development was complemented with a series of games and activities presented to the schoolchildren – aimed at different age groups, and delivered both inside the classroom and outside in the playground and surrounding school grounds – that demonstrated key ideas linking personal health and hygiene to water, sanitation and design thinking.

The 'CPC Hub' workshop space was provided at the head office of PT. IAPMO Indonesia, 3km away by road in the neighbouring Kapuk Timur industrial park which borders Cicau Village. For the duration of the week, the International Team travelled to and from the CPC Hub base and Cicau Village for ongoing discussions, meetings and site visits, before developing a final design solution and workplan which was presented to SDN Cicau 02 management on the final day.



The resulting plan – approved in principle by school management and now in the process of being agreed with local authorities and supporting local contractors – features the following:

- **Renovation of existing toilet facilities in both buildings at SDN Cicau 02.**
- **Expansion of existing toilets in both school buildings, increasing number from two toilets per building, i.e. four toilets shared by approx. 300 students and 12 staff (currently) to four toilets per building, i.e. eight toilets shared by approx. 300 students and 12 staff.**
- **Construction of new handwashing areas outside both renovated toilet facilities.**
- **Installation of two new elevated water tanks for improved water supply to the facilities.**
- **Installation of new wastewater system for the facilities.**
- **Division of the above workplan into two phases:**

**Phase 1: to be completed by International Team at CPC2017 Construction Week (Nov 2017) to deliver all water supply and wastewater upgrade for both buildings, plus renovation/expansion of toilet facilities and addition of handwashing for first building.**

**Phase 2: to be completed by students and teachers from local vocational schools as part of Legacy project (Feb/March 2018), to deliver renovation/expansion of toilet facilities and addition of handwashing for second building.**

Design decisions made throughout the process have considered the new Indonesian Plumbing Standard, SNI 8153:2015, and acknowledged further experience from the Healthabitat O/S Village Sanitation and School Toilet Construction programs in Nepal (a partner program supported by the International Water, Sanitation and Hygiene Foundation). Several of the International Team involved during CPC2017 Design Week are currently or have been previously involved with the work of Healthabitat in Nepal, and were subsequently able to develop these concepts in the new context of Cicau Village and SDN Cicau 02.

CPC2017 represents the first time an international Community Plumbing Challenge program will be delivered in two parts, with the creation of Design Week and Construction Week stages for this edition. Following the successful conclusion of CPC2017 Design Week, Construction Week is scheduled to be hosted at SDN Cicau 02 from **Thur 9 November to Wed 15 November, 2017**. Construction Week will comprise an intensive, seven-day program that will combine global industry representatives with local expertise to deliver the workplan developed during CPC2017 Design Week (as indicated by 'Phase 1' in the outline above).

Crucially, for the long-term impact and sustainability of the CPC2017 program in Indonesia – with the potential to develop for similar school and village settings in the surrounding region and in other parts of the country – the resulting Design Week workplan also identifies initial CPC2017 'Legacy' project initiatives that will continue into 2018 (as indicated by 'Phase 2' in the outline above).

A full schedule for CPC2017 Construction Week will be released in September, 2017: announcing additional, supporting community activities that will complement the project in November, and identifying other exciting ways for industry partners and stakeholders to get involved in the overall program.



## CPC2017 Design Week: Sponsors and Partners

PRESENTED BY: // DIPERSEMBAHKAN OLEH:



SPONSORED BY: // DI SEPONSORI OLEH:



IN ASSOCIATION WITH: // BEKERJASAMA DENGAN:



CPC2017 Design Week was presented by:

- PT. IAPMO Indonesia (International Association of Plumbing and Mechanical Officials) – Indonesia
- IWSH (International Water, Sanitation and Hygiene Foundation)
- World Plumbing Council

Sponsored by:

- ASPE (American Society of Plumbing Engineers) – USA
- UA Plumbers Local 78 (United Association: Union of Plumbers, Fitters, Welders and Service Techs) – USA
- P.I.P.E. (Piping Industry Progress & Education) – USA
- PICAC (Plumbing Industry Climate Action Centre) – Australia
- USAID (United States Agency for International Development) – USA/Indonesia

In Association with:

- BSN (Badan Standardisasi Nasional/National Standardization Agency) – Indonesia
- Healthabitat O/S – Australia
- IAPMO India (International Association of Plumbing and Mechanical Officials) – India
- SST Singapore (School of Science and Technology) – Singapore
- SMK 01, Jakarta (Sekolah Menengah Kejuruan/Vocational High School) – Indonesia
- SMK 26, Jakarta (Sekolah Menengah Kejuruan/Vocational High School) – Indonesia
- Troppo Architects – Australia



## CPC2017 Design Week: International Team

The CPC2017 Design Week International Team were as follows:

- Aidan Ward (Australia): Plumber, representing PICAC.
- Akbar Triandhika Budiman (Indonesia): Plumbing student, SMK 26 Jakarta.
- Angga Sukmanika (Indonesia): Plumbing teacher, SMK 01 Jakarta.
- Anthony Flores (USA): Plumber/Designer, representing UA Plumbers Local 78.
- Budiman Syahputra (Indonesia): Plumbing teacher, SMK 26 Jakarta.
- Jati Pambudi (Indonesia): Engineer, IAPMO Indonesia.
- Jessica Mountain (Australia): Architect, Troppo Architects.
- Matthew Geldard-Ker (Australia): MA Architecture Student, University Western Australia.
- Melynda Kensey (Australia): Architect, representing Healthabitat O/S.
- Muhammad Fauzi Mustaqim Akkas (Indonesia): Plumbing student, SMK 01 Jakarta.
- Nicholas Hipp (USA): Plumbing Engineer, representing ASPE.

## CPC2017 Design Week: Photos and Video

CPC2017 Design Week images are available here:

<http://bit.ly/2vbnExM>

CPC2017 Design Week highlights video is available here:

<http://bit.ly/2g1VL8X> (EN version)

<http://bit.ly/2wBfVNa> (ID version)

## CPC2017 Design Week: Social Media

Facebook: /CommunityPlumbingChallenge

Twitter: @CommPlumbing

Official hashtag: #CommPlumbing