

# LIGHT\*WELL

**SAFE WATER PURE LIGHT**

Light\*Well is a unique green technology designed to provide safe water, affordable and power for remote communities.

**ONEMOUNT**

UNIVERSAL AV MOUNTING SYSTEMS



LIGHT\*WELL

SAFE WATER PURE LIGHT

**ACRYLIC  
EXCELLENCE**

INNOVATIVE PLASTIC SOLUTIONS

- Lightwell International is a member of Cable Ways Ltd.
- It is an Innovative Solution Company.
- It has > 30 year experience.
- It has distributed thousands of precision products widely in Asia, Europe and the Pacific.
- An icon brand in the **telecommunications** and data network markets.
- It has expanded to supply solutions to the **security, healthcare** and **entertainment industries**.

**CCSL**   
CABINET COOLING SYSTEMS

**CEP**  
CUSTOM ENGINEERED PRODUCTS

**CFF**  
CONSTRUCTION FITTINGS & FIXTURES

**OPC**  
OUTDOOR PLANT CABINETS

**IPC**  
INDOOR PLANT CABINETS

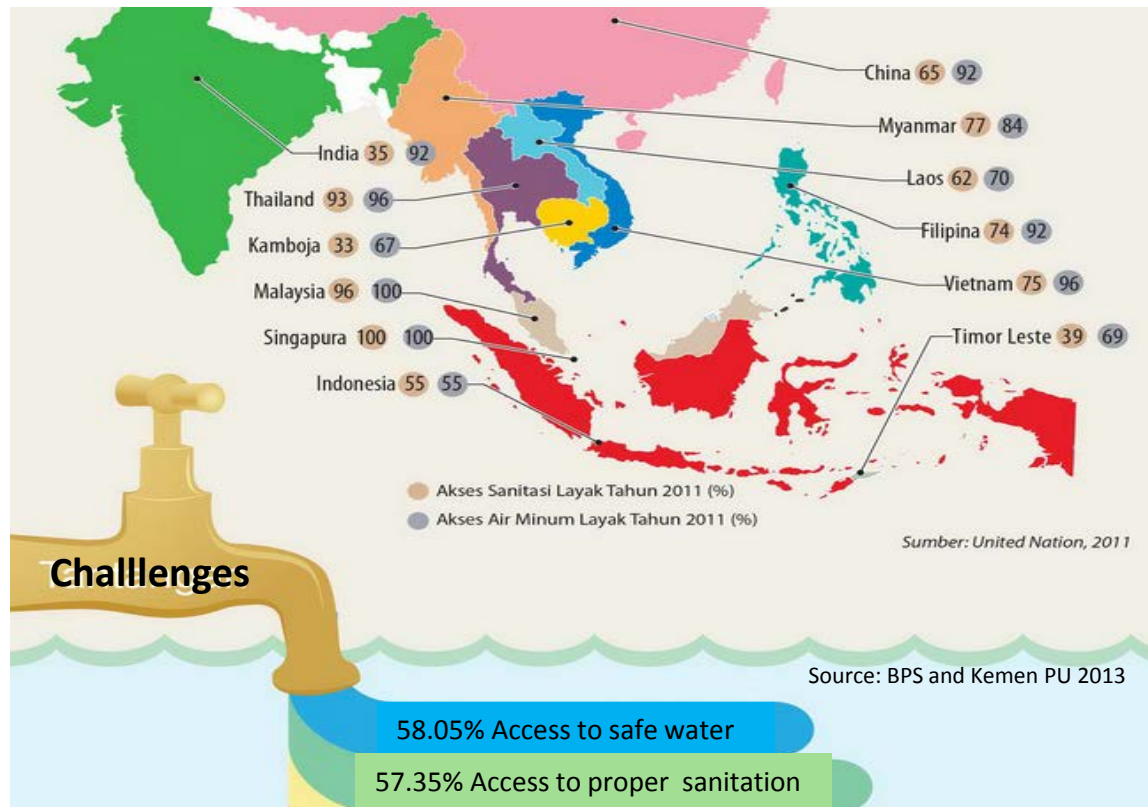
**FOS**  
FIBRE OPTIC SOLUTIONS

## History

It started in 2013 when David Hobday as a Managing Director of Cable Ways visited Indonesia in trade trip. He realised that the huge needs in water and light for marginalised remote communities and asked what he can do to help the situations. From this thought and a year research, Light\*Well was conceived.

## Vision

To convert wasted time and energy of remote communities into valued life outcomes





## Health

Better community health and reduction in youth mortality through safe water.



## Knowledge and skills

Individual learning opportunities through solar lighting at home and school.



## Economic development

Social and economic community empowerment through reduction in energy poverty using renewable resources.



## Renewable Energy

Provide a platform for individual green skills development.  
Promoting the low carbon, green growth economy.

*They are in line with UN millenium goals and NZ aid focus area.*

## A. Lack of access to safe drinking water

**1.8 Million**

People die everyday from diarrhoeal diseases,

**90%**

Are children under five.

Source: WHO, 2015

The result is

**443 million**

school days are lost each year to water-related illness.

**70%**

Of Indonesia's population relies on water obtained from potentially contaminated sources.

Source: ADB, 2010

**663 million**

people lacked improved drinking water sources in which

**39%**

of them live in Asia

Source: WHO, 2015

**6kms**



Is the average distance for women and girls in Africa and Asia to collect water which is often dirty

Source: ([www.pciglobal.org](http://www.pciglobal.org))

# What are the facts? (2)

## B. Limited access to electricity



**1.3 Billion**  
**Almost 20%**  
of the world's population  
has no access to electricity.

Source: World Energy Outlook, 2015

## C. Economic growth



**13%**  
of the world unemployment are young  
people under 24.

Source: International Labour Organization, 2015

## 1. Improve access to safe water

Lightwell uses low pressure bio active ultra filter (40nm pores) to treat polluted non-saline water.

- 99.99% pathogen removal (viruses, bacteria & protozoa).
- Turbidity removal down to 0.1NTU.

Solar panels provides continuous and automated operation and system maintenance.

Scalable filtered capacity from 1200 to 14 400 l/d, subject to raw water source.

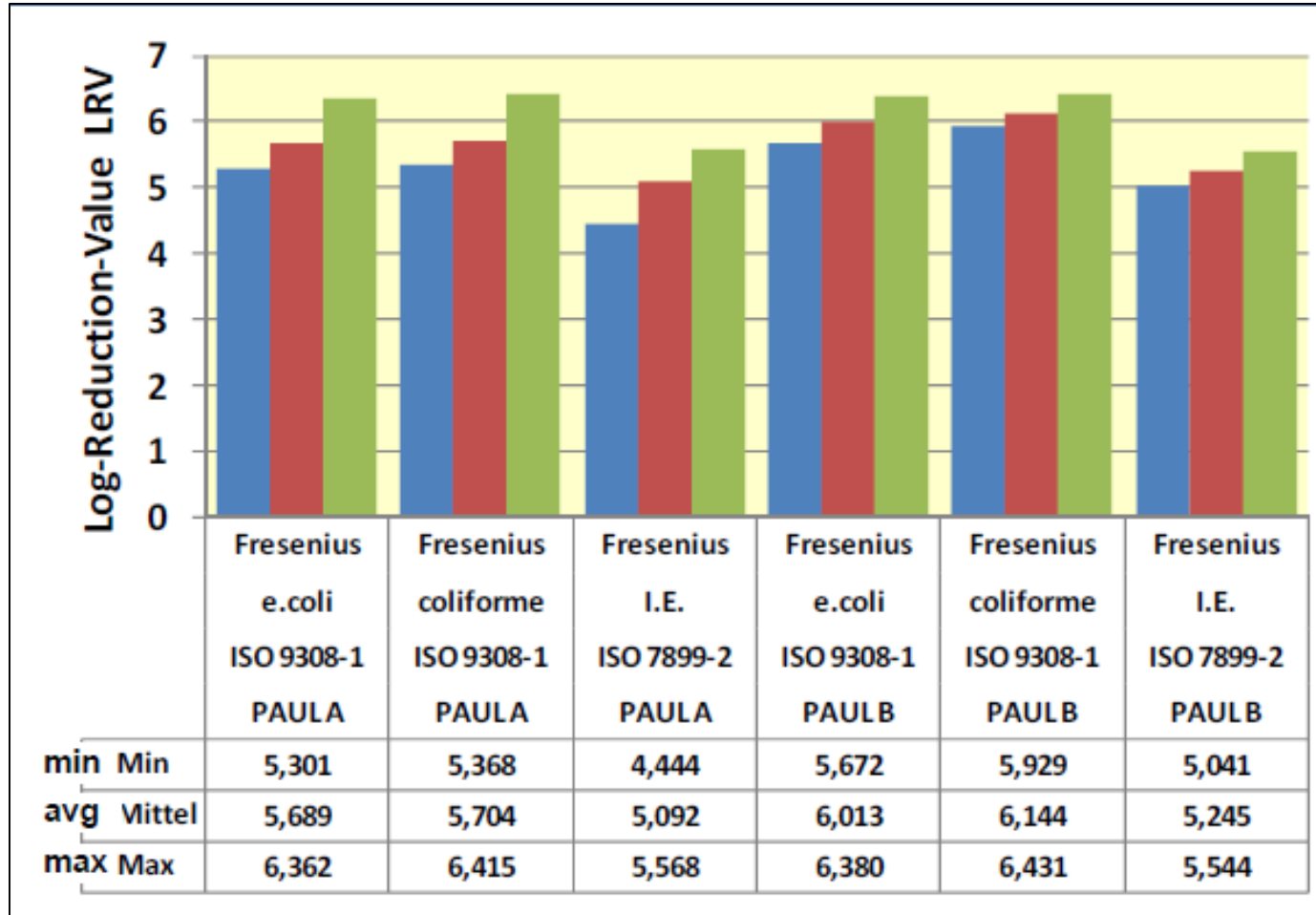
- Water is stored in food grade opaque IBC tanks.



Source: Unicef usa

*Improvement of drinking-water quality would lead to a reduction of diarrhoea episodes of 45%.*

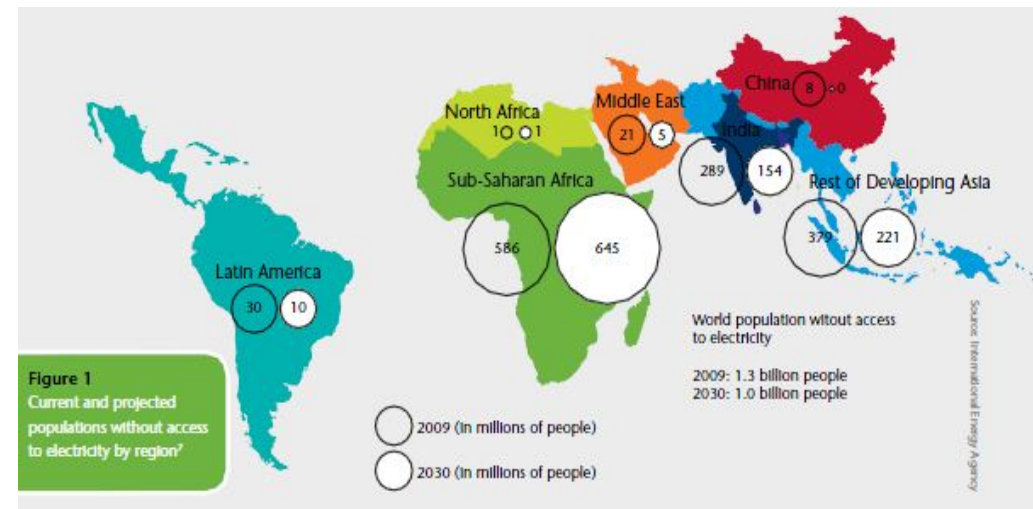
*(Source: WHO, 2015)*





## 2. Affordable access to electricity

- Solar powered LED lighting, 3@30W for community facilities, operated for 10 hours with a controlled time.
- Energy is stored in long life sealed batteries, with a design life of 10 years.
- Options: Distributed lights to community either through charged lanterns or cables.
- Easy access to 20 position USB charge station for cell phones and tablets.
- RCBO protected 220V power tool charging strip with a capacity of 500W.



Source: [www.globalserpa.org](http://www.globalserpa.org)

*Lighting improves learning opportunity.  
Solar power reduces energy, poverty and  
environmental degradation*

## 3. Economic development

- Creating partnership with in-country based training organisations.
- Developing training modules with local institutions including the business, social and technical aspects of implementations.
- Propagating skill training country wide through vocational training network.
- Empowering local young graduates to conduct site assessment, manufacturing and installation of light\*well system.



Identified partner in Indonesia:

SMK Prakarya International  
(Vocational school)

### Training of trainers (ToT) module

Including social and technical aspects

- Site assessment
- Computerised data entry
- How the system works
- Assembling
- Site preparation
- Installation
- Trouble shootings
- Monitoring
- Operation and maintenance
- Set-up water users committee

*While emphasizing on hand skills, the local training coordinator can add business management skills for entrepreneurship development such as marketing, micro-finance, accounting, etc. depending on the local need.*



- Stand alone self contained water purification and lighting system.
- Expandable water & power capacity.
- Space effective.
- Simple to install and integrate into community.
- Very low maintenance NO technician needed, NO consumables.
- Choice of water outlets (tap stands, water fountain, etc.).
- Additional water treatments for medical applications.

Light\*WELL “CKitchen”



Light\*WELL “Park”



Light\*WELL “Village”  
with charging station



Light\*WELL “School”



## 1. Enhance the quality of life

- Reduction in water-borne diseases
- Reduction in infant mortality
- Reduction in hours lost in water collection
- Increase in productivity (hours of light)

## 2. Improve Child Education

- Increase hours available for study and play.



## 3. Encourage micro-enterprise

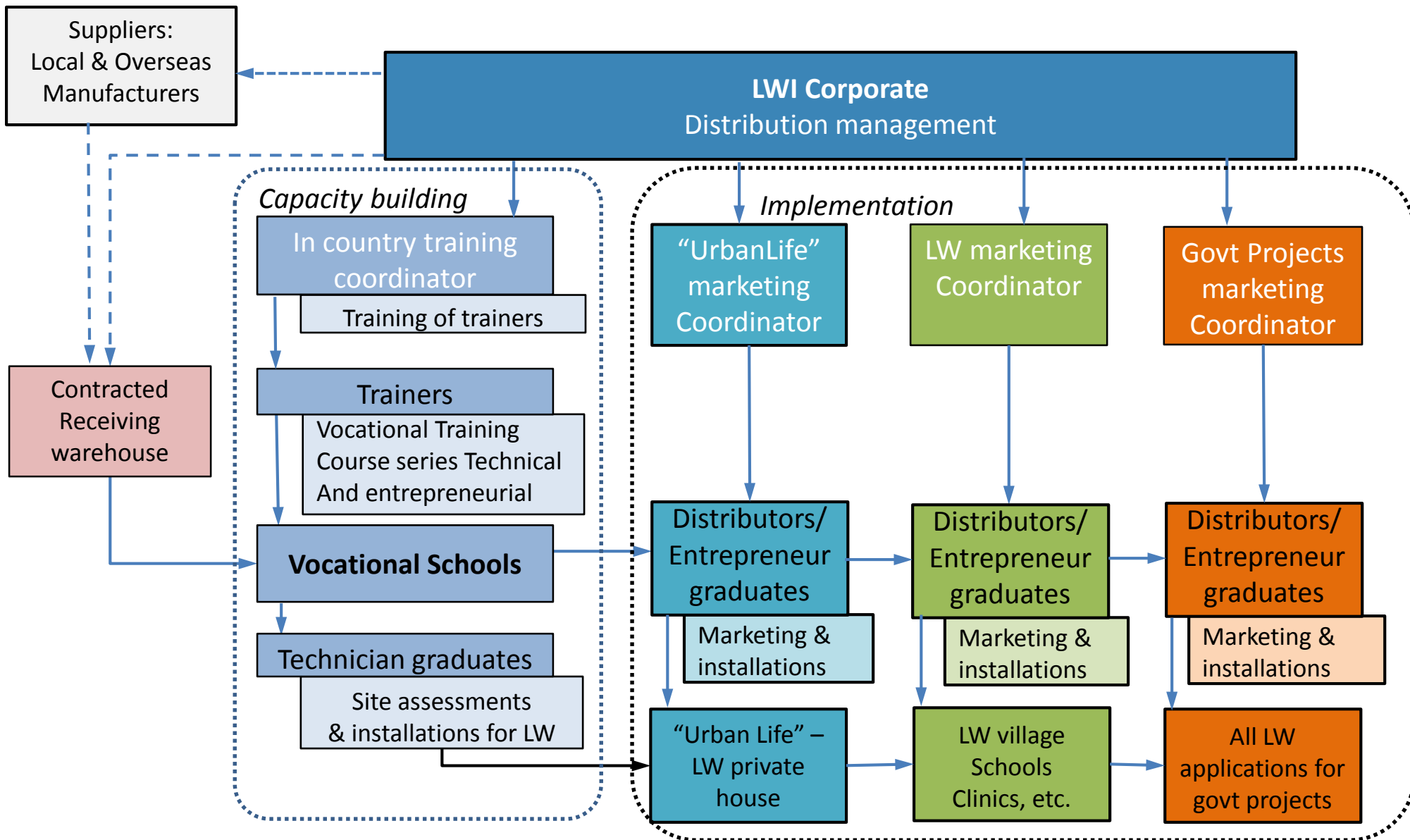
- Prolong production hours to after daylight
- Produce entrepreneurs from vocational graduates

## 4. Creates Entrepreneurial Opportunities

## 5. Create green jobs

- Generate trained installers from vocational school.

# Product distribution model



# Assembled like a jigsaw to meet your needs

Rev 011 9.2015

## LW V T 1A 1 12 T2 0 0 0 A

### Base product application:

V - Village K - commercial Kitchen  
P - Park U - Urban life  
S - School  
C - Clinic  
O - Outpost  
X - Custom

### Water Source:

W - Shallow well  
D - Deep well  
T - Rainwater tank  
R - River  
S - Spring  
X - Custom

### Lift head from source to LW:

(Change \* to A for above, or B for below)

00 - Low pressure fed  
1A - < 10 meters above LW  
2\* - 10 to less than 20 meters  
3\* - 20 to less than 30 metres  
4\*-< 9\* - 30<40 - 80<90 m

### Length from source to LW

0 - @ source  
1 - < 100 meters  
2 - 100 < 200 meters  
5 - 200 < 500 meters  
X - > 500 meters

### Filtered water production (minimum):

03 - 300 litres/day  
12 - 1200 < 3600 litres/day  
24 - 2400 < 7200 litres/day  
36 - 3600 < 10800 litres/day  
48 - 4800 < 14400 litres/ day

### Product supplied:

A - Assembled  
K - Kit form to VTC

### 230V Power supply:

0 - Not fitted  
1 - 0.1 kW  
5 - 0.5 kW  
C - 3.0 kW  
E - 5.0 kW  
J - 10 kW  
X - Custom

### Lighting provided:

0 - Basic: Lit taps + 3 @30W  
1 - Basic + 10 dwellings @10W  
2 - Basic + 25 dwellings @10W  
5 - Basic + 50 dwellings @10W  
C - Basic + 100 dwellings @10W  
X - Custom

### Additional treatment:

0 - No additional treatment fitted  
C - Carbon filter  
U - UV sterilization  
B - Both Carbon filter and UV  
X - Custom

### Water outlets:

V1 - ¼" valve, V2 - 1" valve  
T2 - (2) x ½" taps  
S6 - (6) tap public filling station  
F4 - (4) x school fountains  
P1 - (1) x lit park fountain  
XX - Custom

Thank you,  
please contact us for a free  
quote and further inquiries

Contact us:

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