# SMALL & MINI HYDRO HIGHLIGHTS

NEW

## RANNEY FALLS

Trent River, Northumberland | Canada
Output: 1 × 10.5 MW
Scope: "from water-to-wire" package
**Highlight:** 10 MW ECOBulb* turbine, future largest output worldwide

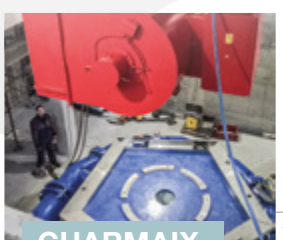
## LUZMA I AND II

Antiochia | Colombia
**Start of commissioning June 2017**
Output: 2 × 11.4 MW each
Scope: electro-mechanical equipment
**Highlight:** 2 HPPs including dissipation systems of 20 MW each

## CHAUDIÈRE FALLS

Ottawa | Canada
**Commissiong in finalization**
Output: 4 x 8 MW
Scope: "from water-to-wire" package
**Highlight:** most powerful ECOBulb* turbines by ANDRITZ HYDRO to date

→ INTERVIEW P.32



## CHARMAIX

French Alps | France
**Installation on schedule**
Output: 1 × 1.5 MW
Scope: electro-mechanical equipment; abandoned since 1998, now in rehabilitation
**Highlight:** Mini Compact project

## SCHATTENHALB 1+

Canton Berne | Switzerland
**Put into commercial operation**
Output: 1 × 2.77 MW
Scope: vertical Pelton turbine
**Highlight:** Reichenbach Creek famous through Sherlock Holmes novel

## DUE

Sucumbios | Ecuador
**Start of commissioning June 2017**
Output: 2 × 25 MW
Scope: "from water-to-wire" package
**Highlight:** 65 MW HPP including big pressure relief valves

## SIGCHOS

Cotopaxi, Cantón Sigchos | Ecuador
**Put into commercial operation**
Output: 3 × 6 MW
Scope: electro-mechanical equipment

## CARHUAC

Santa Eulalia River | Peru
**Project execution on schedule**
Output: 2 × 10.5 MW
Scope: "from water-to-wire" package

→ MORE P.41

The market for small and mini hydropower is expanding rapidly. In times of globalization and significant demographic and social change there are many opportunities for medium and small applications and decentralized off-grid solutions. Similarly, requests for smaller standardized units to be installed alongside or even as an alternative to large generating units are increasing, either to supply local communities or to meet economic as well as ecological demands.

## INNERTKIRCHEN 3

Canton Berne | Switzerland
**Put into commercial operation**
Output: 1 × 3.2 MW
Scope: electro-mechanical equipment
**Highlight:** add 11.5 GWh/year electrical energy for Canton of Berne

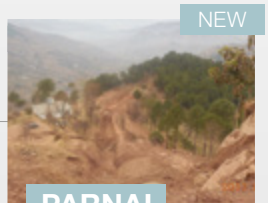
→ MORE P.40

NEW

## NAM BAN 3

Nam Ban River, Lai Chau Province | Vietnam
Output: 2 × 11 MW
Scope: electro-mechanical equipment

NEW



## PARNAI

Poonch District of Jammu & Kashmir state | India
Output: 3 × 12.5 MW
Scope: "from water-to-wire" package
**Highlights:** anti-abrasive coating of runner and nozzle assemblies

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## NAMGANG

Namgang River | South Korea
Output: 2 × 9.2 MW
Scope: turnkey refurbishment incl. Balance of Plant equipment
**Highlight:** 20% increase of output

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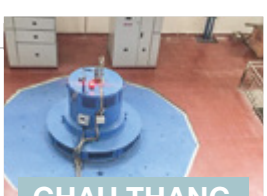
## NKUSI

Nkusi River/Lake Albert | Uganda
Output: 1 × 10.58 MW
Scope: "from water-to-wire" package;
**Highlights:** high quality delivery with minimal interphases and simplified logistics



## CHAU THANG

Quang River | Vietnam
**Commissioning June 2017**
Output: 2 × 7 MW
Scope: electro-mechanical equipment
**Highlights:** first low-head Kaplan out of India

NEW

## HASANG

North Sumatra | Indonesia
Output: 3 × 13.73 MW
Scope: entire electro-mechanical package for all three generating units
**Highlights:** major contribution to meet electricity demand of Sumatra Island

NEW

## LUACHIMO

Lunda-North Province | Angola
Output: 4 × 9 MW
Scope: electro-mechanical equipment; complete new 36 MW powerhouse next existing power station
**Highlight:** Compact Axial Turbines (CAT)

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NEW

## HOUAY KAPHEU

Saravane Province | Lao PDR
Output: 2 × 2,5 MW
Scope: electro-mechanical equipment