



# SDG 6

## Akses Air Bersih dan Sanitasi Clean Water and Sanitation

UI menyadari pentingnya keberlanjutan ketersediaan air, baik untuk kepentingan saat ini maupun untuk masa yang akan datang. Pengelolaan air dilakukan tidak hanya dengan pendekatan penggunaan teknologi, tetapi juga pendekatan sosial.

UI realizes the importance of the sustainability of available water, both for present and future needs. Water management is carried out not only by technology but also through social approaches.

### Pemenuhan Kebutuhan Air Bersih Fulfillment of Clean Water Needs

Untuk memenuhi kebutuhan air bersih di dalam lingkungan kampus, Universitas Indonesia bekerja sama dengan Perusahaan Daerah Air Minum (PDAM) Kota Depok. Berikut adalah penggunaan air bersih selama 2019.

To meet the need for clean water in the campus environment, Universitas Indonesia works with the Depok City Water Company (PDAM). The following is the use of clean water in 2019.



**Tabel Penggunaan Air PDAM Tahun 2019**  
Table of PDAM Water Usage in 2019

No.	Bulan Month	Volume (m <sup>3</sup> )
1	Januari January	18.325
2	Februari February	20.101
3	Maret March	18.262
4	April April	19.004
5	Mei May	18.993
6	Juni June	15.395
7	Juli July	21.338
8	Agustus August	13.490
9	September September	16.904
10	Okttober October	11.752
11	November November	13.319
12	Desember December	13.430
TOTAL (m <sup>3</sup> )		200.313

Universitas Indonesia melakukan *monitoring* penggunaan air di dalam lingkungan kampus setiap bulannya. Tidak hanya *me-monitoring* penggunaan air, tetapi juga *me-monitor* kadar sumber air bersih di dalam lingkungan kampus setiap enam bulan sekali. Hasil *monitoring* ini disampaikan kepada Pemerintah Kota Depok melalui Laporan DELLH (RKL-UPL) lingkungan Kampus UI.

Seiring dengan meningkatnya populasi di dalam lingkungan Kampus UI, untuk memenuhi kebutuhan air bersih Universitas Indonesia menerapkan kebijakan penghematan penggunaan air dan menerapkan pengelolaan air bekas agar dapat digunakan kembali.

Universitas Indonesia monitors water usage in the campus environment every month and checks the content of its clean water source every six months. The monitoring results are conveyed to the Depok City Government through the DELLH Report (RKL-UPL) UI Campus environment.

Following the increasing population within the UI Campus environment, to meet the needs of clean water, Universitas Indonesia has implemented a policy of conserving water usage and implementing used water management to be reused.

## Program Daur Ulang Air

### Water Recycling Program

Air daur ulang merupakan salah satu sumber air yang digunakan hampir di seluruh unit atau fakultas yang ada di UI. Masing-masing unit atau fakultas, umumnya memiliki fasilitas *Water Treatment Plant*, yang dapat mengolah air bekas pakai maupun limbah cair untuk dapat digunakan kembali sebagai air bersih seperti untuk penyiraman tanaman, kebutuhan *flushing toilet*, dan lainnya.

Fakultas Kedokteran, salah satu fakultas tertua di UI, menggunakan *Water Treatment Plant* yang mampu mengolah air daur ulang dengan kapasitas mencapai  $30 \text{ m}^3$  per jam. Air yang diolah merupakan air pembuangan bekas berwudu, air hujan, air bekas pencucian piring, dan limbah cair lainnya.



Demikian pula di Fakultas Teknik, yang menerapkan instalasi pengolahan air limbah untuk kemudian dialirkan menuju sumur resapan sebagai cadangan air.

Contoh paling sederhana dari proses pemanfaatan air bekas ini ialah pemanfaatan air buangan penyejuk udara (AC) yang ditampung untuk digunakan menyiram tanaman. Langkah yang lebih jauh dilakukan oleh Fakultas Ekonomi dan Bisnis yang menerapkan teknologi pengolahan air berupa *Reverse Osmosis* (RO) untuk menyediakan air siap minum. Air RO tersebut dapat dikonsumsi langsung, dispenser air RO pun tersebar hampir di seluruh Gedung FEB UI.

Almost all units or faculties at UI use recycled water as a source of water. Each of them generally has a Water Treatment Plant facility, which can convert used water or liquid waste to be reused as clean water, such as for watering plants, toilet flushing needs, and others.

The Faculty of Medicine, one of the oldest faculties at UI, uses a Water Treatment Plant capable of treating recycled water with a capacity of up to  $30 \text{ m}^3$  per hour. The treated water is originated from ablution disposal water, rainwater, dishwashing water, and other liquid wastes.



Likewise, the Faculty of Engineering implements a wastewater treatment plant and then flows it into infiltration wells as water reserves.

The simplest example is the utilization of air conditioning (AC) wastewater to water plants. A further step was taken by the Faculty of Economics and Business, which applied water treatment technology in the form of Reverse Osmosis (RO) to provide ready-to-drink water. RO water can be consumed directly. RO water dispensers are even distributed almost throughout the FEB UI Building.



*Urinoir flushing system*



*Toilet flushing system*



*Toilet flushing system pada Toilet Difable.  
Toilet flushing system at the Disabled Toilet.*



*Mesin cuci piring otomatis terpusat di kantin mahasiswa.  
A centralized automatic dishwasher at the student canteen.*

## Penyediaan Air Minum Gratis Provision of Free Drinking Water

Universitas Indonesia memberikan layanan air minum gratis kepada seluruh sivitas akademika dengan membuat fasilitas *Water Fountain*. Fasilitas ini sudah banyak tersedia di hampir semua fakultas, asrama mahasiswa, Gedung Pusat Kegiatan Mahasiswa (Pusgiwa), dan Masjid UI.

Universitas Indonesia provides free drinking water services to its community members by making Water Fountain facilities. It is widely available in almost all faculties, student dormitories, the Student Activity Center Building (Pusgiwa), and the UI Mosque.



## Kolaborasi Ketahanan Air

Collaboration on Water Security

### Citarum River's Water Drinkable by 2025

Universitas Indonesia berkolaborasi dengan Monash University (Australia) dan Institut Pertanian Bogor (IPB, Indonesia) dalam Urban Water Research yang berkolaborasi lintas disiplin, mulai dari politik, hukum, ekonomi, sosiologi, perencanaan kota, arsitektur, teknik sipil, ilmu tanah dan kehutanan, untuk melakukan riset bersama. Seperti diketahui, Sungai Citarum mengalami pencemaran air yang disebabkan limbah industri dan limbah rumah tangga. Penelitian ini dilakukan dengan tujuan revitalisasi aliran Sungai Citarum.

Kegiatan ini digagas pada 2018 dan masih berjalan hingga 2020.

### Citarum River's Water Drinkable by 2025

Universitas Indonesia collaborates with Monash University (Australia) and the Bogor Agricultural Institute (IPB, Indonesia) in Urban Water Research. This joint research involves various disciplines, such as politics, law, economics, sociology, urban planning, architecture, civil engineering, soil science, and forestry. As many know, the Citarum River is experiencing water pollution caused by industrial waste and household waste. This research aimed to revitalize the Citarum River flow.

This activity was initiated in 2018 and is still running until 2020.

## Drinkable water: Mission impossible?



### Related posts

A guide for leapfrogging towards a water sensitive Bogor, Indonesia



Showcase passes Bogor's water sensitive future into the hands of local water champions





## RESEARCH COLLABORATION

Universitas Padjadjaran – Universitas Indonesia – Monash University

### Australia-Indonesia Healthy River Alliance Webinar 2020

**Dr. Cipta Endiyana**  
Center of Citrum Research  
Faculty of Geological Engineering  
Universitas Padjadjaran

**Dr. Nadia Astiani**  
Center of Citrum Research  
Faculty of Law  
Universitas Padjadjaran

**Dr. Reni Suwarsa**  
Faculty of Social and Political Science  
Universitas Indonesia

**Dr. Dwiandini Marthamy**  
Faculty of Engineering  
Civil Engineering Dept.  
Universitas Indonesia

**Prof. Diego Ramirez**  
Art Design & Architecture  
Monash University

**Dr. Jane Holden**  
Sustainable Development Institute  
Monash University

**Dr. Wikke Novita**  
Social Science  
Monash University

#### Research Objective

COVID-19 has interrupted a learning alliance between Australia and Indonesia that aims to share knowledge and expertise for advancing our common interest in protecting vulnerable rivers and planetary health. This project is designed to establish a next generation of virtual engagements that can sustain productive bilateral collaboration, while replacing the need for extensive international travels between Australia and Indonesia in the coming 2-3 years. Specifically, we will develop a series of online webinars on a multilingual platform and bypasses of community engagements as the first step to formulating our virtual collaboration in this unprecedented time. The seminar and outcomes will bring together academics, policymakers, practitioners, civil society, and communities across the two nations to promote science and innovation, while building trust and influence across the regions. It will generate know-how and open a way forward that enable knowledge collaboration to thrive in a virtual setting.

Further information: [cipta.endiyana@ungkit.ac.id](mailto:cipta.endiyana@ungkit.ac.id)