

SHOWCASING PARTNERSHIPS AND PROJECTS

Using NetCreate to accelerate Water, Wastewater and TSE Master Planning

digital future

Who We Are

Atkins is one of the world's most respected design, engineering and project management consultancies. As a global fully integrated professional services and project management company, we help our clients plan, design and enable major capital projects, and provide expert consultancy that covers the full project lifecycle. Our breadth of capability is the core of our strength and we bring our global expertise together to deliver solutions to local challenges, putting resilience, sustainability and productivity are the core of everything we do.

Our Technology

As a leading international consultant, Atkins is always seeking to improve the delivery of its services to generate benefits for our clients and their customers. Digital is just one way of achieving this either through the automation of our workflows, the development of in-house digital tools or collaboration with third party suppliers.

NetCreate is just one example of where we have challenged ourselves deliver smarter. Using opensource GIS datasets we can automatically generate water, wastewater and treated sewage effluent networks, to accelerate master planning thus allowing early scope definition for client and stakeholder engagement.

About Atkins

Atkins NetCreate is an innovative digital process using global open-source GIS datasets to automatically create an outline wastewater network on a repeatable basis. It brings together topographic data, road layouts and population distribution data to assign the shortest route from each property to the lowest point in the catchment along defined roads. A standardized approach makes it repeatable throughout countries or across regions, and configurable to specific needs. The output from NetCreate can be integrated into proprietary hydraulic modelling software for the refinement of the design. The concept has been adapted for water supply and Treated Sewage Effluent (TSE) networks.

NetCreate was originally developed to determine the future wastewater network requirements for 150 catchments in the Medina and Tabuk region of Saudi Arabia to serve a population of 4.8M by 2050. This allowed high level wastewater infrastructure quantities to be developed quickly for incorporation into the Master Plan. Following subsequent trials in India and Kenya, we have recently completed three commissions for the Asian Development Bank in the Philippines, Cambodia and Indonesia. We are currently using NetCreate on a 55km² new development in the south of Saudi Arabia for the concept planning of wastewater, potable water and TSE networks.

Using NetCreate significantly reduces the time needed for wet utility planning, enabling early client feedback to help inform master plans and provide indicative quantities for high level cost estimates. Being a digital process, NetCreate generates a consistent output easily configurable for scenario planning such as comparing centralized / decentralized treatment options or gravity / pumping networks. It has been proven to accelerate master planning to allow early scope definition for client and stakeholder engagement.

NetCreate was recognised by the Global Infrastructure Hub as a Top 10 finalist in the 2020 Infrastructure Challenge, our submission from which can be found at: <https://infrachallenge.github.org/infrachallenge-2020/entrants/creating-networks/>

Interactive Session

25 October, 4:30–5:00 p.m.
(GMT +8, Manila time)

[Join the Zoom interactive session](#)
(passcode: #eMarket2)



To know more about our Smart Water Technology

BROCHURES

- [PS NetCreate Case Study](#)
- [Pontianak NetCreate Case Study](#)
- [Battambang NetCreate Case Study](#)

VIDEO

- [NetCreate InfraChallenge Top 20 Submission](#)

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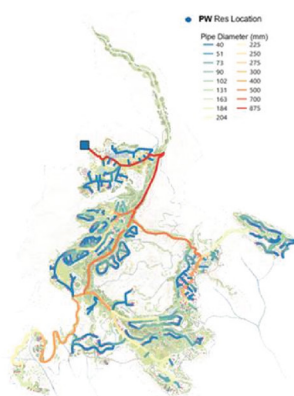
Website

<https://www.atkinsglobal.com/homepage>

Wastewater



Potable Water



Treated Sewage Effluent

