News Links on Water Sector

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CENTRAL WATER COMMISSION

GOVERNMENT OF INDIA

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT &

GANGA REJUVENATION

MINISTRY OF JAL SHAKTI

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Centre to incentivise States to promote efficient reuse of water

Date: 01/10/2024

The Centre is set to incentivise states and Union territories to promote efficient reuse of water under an initiative, 'Jal hi Amrit, under the AMRUT (Atal Mission for Rejuvenation and Urban Transformation) 2.0 mission of the Union ministry of housing and urban affairs, officials familiar with the matter said on Tuesday. It has been introduced as part of the 100-day agenda of Modi 3.0 government and is expected to serve as a platform for competition among the cities to ensure treated water meets environmental standards on a sustained basis and enable peer learning. A total of 140 sewage treatment plants (STPs) with a combined capacity of 5,000 MLD (million liters per day) have already been onboarded.

The rewards will be based on the performance of STPs under a clean water credit system framework which would be valid for six months. The quantum of money will vary based on the performance and the size of these STPs. The highest reward of ₹8 crore will be given for STPs of 100 and above MLD achieving a five-star rating while the lowest reward of ₹0.25 crore will be given for an STP with a capacity of less than 5 MLD and achieving a star rating of 3. Officials said urban local bodies or parastatals such as Delhi Jal Board (DJB) will fill in details via an online module which will be followed by a third-party verification as done for Swachh Survekshan awards. Further the ministry would also carry out a detailed gap analysis and conduct targeted training programmes based on the assessments.



Source: https://www.hindustantimes.com/india-news/centre-to-incentivise-states-to-promote-efficient-reuse-of-water-101727781293659.html

The future of water reuse: How innovations in membrane filtration are helping conserve water resources

Date: 01/10/2024

Increasing demands for clean water are straining water resources around the world. As the population continues to grow and more people move to urban areas, water utilities are facing multiple challenges related to water supply and water treatment operations. Water management at the local level cannot be overlooked, as the U.N. estimates that municipalities are responsible for 12% of all freshwater withdrawals.[1] In addition to facing increased water needs, utility companies are working to comply with new legislation regarding water usage, discharge treatment standards, and sustainability measures while facing an aging infrastructure and limited funds. Many industries are also vulnerable to water shortages. Water is often used in manufacturing for cooling and cleaning, resulting in wastewater that must be treated before being reused or released back into the environment. Some contaminants are especially difficult to remove, such as small oil particles, and can create sludge that requires specialized disposal.

Challenges affecting the water sector

Climate change is impacting water supply as well as water quality. Severe storms and floods can compromise water sources by increasing the dispersion of pollutants, and rising sea levels are creating higher levels of saltwater intrusion. Prolonged droughts are reducing water availability, with multiple western states including Arizona, California, and Nevada imposing water conservation restrictions due to water shortages in the Colorado River Basin.



Source: https://www.wwdmag.com/water-reuse-recycling/article/55131204/the-future-of-water-reuse-how-innovations-in-membrane-filtration-are-helping-conserve-water-resources

Liquid asset: Investing in water is good for returns, good for the planet

Date: 02/10/2024

Only a fraction of all the water on earth can be used by humans. Not only is water both scarce and finite, but the United Nations (UN) also describes it as "vital to the functioning of the global economy". How water resources are managed and conserved as populations and economies continue to grow is a critical issue facing every nation on earth – developed, as well as developing.

Environmental reporting not-for-profit organisation CDP says less than 1.2 per cent of all the water on earth is useful to humans. Its very scarcity, and the need to manage it carefully, presents opportunities to invest in businesses or industries whose supply chain includes water – this includes agriculture, perhaps most obviously; in businesses that can reshape their processes to use less; in companies developing new ways to conserve fresh water and recycle used water; and in projects to clean up waterways and oceans. There are reasons beyond simple risk and return issues and maximising pensions for beneficiaries as to why investing in water is such an important issue. Critically, investing in the better stewardship of water resources is also seen as fundamental to addressing climate change and ensuring the long-term health of the environment. Fresh water is one of the nine so-called Planetary Boundaries (PB) framework (below) that the Stockholm Resilience Centre says are "processes that regulate the stability and resilience of the Earth's system, and "within which humanity can continue to develop and thrive for generations to come".



Source: https://www.top1000funds.com/2024/10/liquid-asset-investing-in-water-is-good-for-returns-good-for-the-planet/

Reliance Group partners with Bhutan govt to develop solar, hydropower projects

Date: 02/10/2024

Reliance Group announced a strategic partnership with the Bhutan government on October 2 to develop solar and hydropower projects, making this the largest foreign direct investment by a private company in the renewable energy sector in the Himalayan country. As part of the partnership with Druk Holding and Investments Ltd, the commercial and investment arm of the government of Bhutan, the Anil Ambani-led Reliance Group will jointly develop 500 MW of solar and 770 MW of hydropower projects in the country. The 500-MW solar plant in Bhutan's Gelephu Mindfulness City will be executed over the next two years in two phases of 250 MW each, according to a press release. Once completed, the solar plant will be the largest of its kind, surpassing all existing solar installations in the country, and will produce clean, renewable energy to help mitigate the impacts of climate change.

In addition to the solar project, Reliance Power Ltd and Druk Holding will jointly develop the 770-MW Chamkharchhu-1 Hydro Project, which has been classified as a run-of-the-river project under a concession model in accordance with Bhutan government policy, the release added.



Source: https://www.moneycontrol.com/news/business/companies/reliance-group-partners-with-bhutan-govt-to-develop-solar-hydropower-projects-12834249.html

The Importance of Resuming Construction Of India-Funded Mega Dam In Bhutan

Date: 06/10/2024

In what can be termed as significant headway for cooperation in the hydropower sector between India and Bhutan, the governments of the two South Asian neighbours have finally agreed to recommence construction of the 1,200 MW Punatsangchhu-I Hydroelectric Project (PHEP-I) after work was halted at the initial stage itself due to challenging geological conditions.

The India-funded PHEP-I is by far the biggest hydropower project under construction in Bhutan. It is a landmark bilateral cooperation project between India and Bhutan, aimed at harnessing the immense hydropower potential of Bhutan's rivers. Located on the Punatsangchhu River in Wangdue Phodrang district, this project holds great strategic and economic significance for both countries. Construction of the concrete gravity dam started in November 2008 and was initially scheduled to be completed by 2015. However, in 2013, a massive landslide on the right bank of the dam site brought construction work to a complete halt.Now, after 11 years of deliberations and more than 30 meetings of the Technical Coordination Committee (TCC), the governments of India and Bhutan have reached a consensus to resume construction of the dam, Kuensel news website reported on Saturday.



Source: https://www.etvbharat.com/en/!opinion/explained-the-importance-of-resuming-construction-of-india-funded-mega-dam-in-bhutan-enn24100505961

WMO report highlights growing shortfalls and stress in global water resources

Date: 07/10/2024

The year 2023 marked the driest year for global rivers in over three decades, according to a new report coordinated by the World Meteorological Organization (WMO), which signaled critical changes in water availability in an era of growing demand. The last five consecutive years have recorded widespread below-normal conditions for river flows, with reservoir inflows following a similar pattern. This reduces the amount of water available for communities, agriculture and ecosystems, further stressing global water supplies, according to the State of Global Water Resources report. Glaciers suffered the largest mass loss ever registered in the last five decades. 2023 is the second consecutive year in which all regions in the world with glaciers reported iceloss.

With 2023 being the hottest year on record, elevated temperatures and widespread dry conditions contributed to prolonged droughts. But there were also a significant number of floods around the world. The extreme hydrological events were influenced by naturally occurring climate conditions – the transition from La Niña to El Niño in mid-2023 – as well as human induced climate change. "Water is the canary in the coalmine of climate change. We receive distress signals in the form of increasingly extreme rainfall, floods and droughts which wreak a heavy toll on lives, ecosystems and economies. Melting ice and glaciers threaten long-term water security for many millions of people. And yet we are not taking the necessary urgent action," said WMO Secretary-General Celeste Saulo.



Source: https://wmo.int/media/news/wmo-report-highlights-growing-shortfalls-and-stress-global-water-resources

Water is 'canary in the coalmine' of climate change: WMO

Date: 07/10/2024

The State of Global Water Resources report released on Monday also highlights that over the last five years below-normal conditions for river flows have been recorded with less water reaching reservoirs. The reduction in supplies has reduced the amount of water available for communities, agriculture and ecosystems. Currently, 3.6 billion people worldwide face inadequate access to water at least a month per year and this is expected to increase to more than five billion by 2050, according to UN Water. The report also reveals that glaciers suffered the largest loss of mass ever registered in the last five decades. Every region in the world where glaciers are present reported ice loss. Ice loss has produced more than 600 giga tonnes of water, much of which has ended up in the ocean as well as some riverways. Meanwhile, 2023 was recorded as the hottest year on record, leading to elevated temperatures and widespread dry conditions, which contributed to prolonged droughts. Unprecedented stress "Water is the canary in the coalmine of climate change. We receive distress signals in the form of increasingly extreme rainfall, floods and droughts which wreak heavy toll on lives, ecosystems and economies said WMO Secretary-General Celeste Saulo. The report also paints a stark picture of the world's freshwater resources, highlighting unprecedented stress, exacerbated by climate change and increasing demand.

Climate change intensifies: A significant number of floods across the world are highlighted in the report. The surge in extreme hydrological events has been influenced by naturally occurring climate conditions including the transition from La Niña to El Niño weather patterns in mid-2023 as well as human induced climate change



Source: https://news.un.org/en/story/2024/10/1155401

Govt plans Hirakud canal renovation

Date: 08/10/2024

Bhubaneswar: The canal system of Hirakud dam is set to be renovated at a cost of Rs 855 crore, the govt has decided. Target has been set to finish work in four years, a source said. At present, the canal system irrigates 1.59 lakh hectares of land in Kharif season and 1.12 lakh hectares in Rabi season. Farmers of Bargarh and Subarnapur districts are the main beneficiaries of the canal system.

Poll

very since the dam was built in 1957 for the purpose of flood control, irrigation and power generation, the water courses (small water channels) that draw water from distributaries of the main canal, have not undergone any repair. They are in bad shape, resulting in not enough water percolating to the farmland.



Source: https://timesofindia.indiatimes.com/city/bhubaneswar/hirakud-dam-canal-renovation-rs-855-crore-investment-for-improved-irrigation/articleshow/114026598.cms

Jal Jeevan Mission: 160 mn rural families have access to tap water now

Date: 07/10/2024

Nearly 16 crore rural households, ensuring 78.58 per cent of rural homes, now have access to potable water, a sharp increase from the 17 per cent coverage when the Jal Jeevan Mission began, according to the Jal Shakti ministry. Aimed at bridging the rural-urban divide and improving public health, the mission's objective is to provide Functional Household Tap Connections (FHTCs) to every rural household by 2024As of October 6, the ministry said the mission has provided tap water connections to 15.19 crore rural households, ensuring 78.58 per cent of rural homes now have access to potable water, a sharp increase from the 17 per cent coverage when the programme began. The initiative, which is also tackling water quality and drought-prone areas, is directly benefiting 19 crore rural families.

The mission has added 11.95 crore new tap water connections since its launch, with states like Goa, Haryana, Telangana, and Himachal Pradesh achieving 100 per cent rural household coverage. Additionally, over 9.29 lakh schools and Anganwadi centres across the country now have access to clean water, the ministry said in a statement. Over 24 lakh women have been trained to test water quality using Field Test Kits, with more than 54 lakh water samples tested so far, it said.



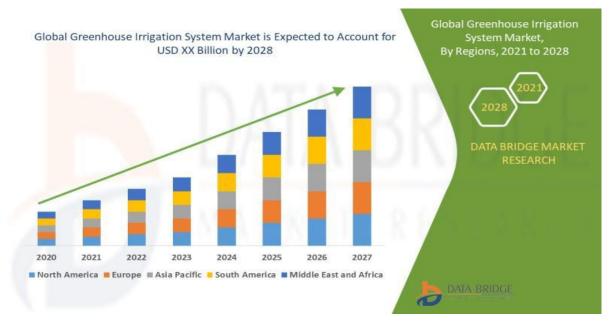
Source: https://www.business-standard.com/india-news/jal-jeevan-mission-160-mn-rural-families-have-access-to-tap-water-now-124100700570 1.html

Greenhouse Irrigation System Market is expected to expand at a compound annual growth rate of 8.80% over the forecast period of 2021 to 2028

Date: 27/09/2024

The Greenhouse Irrigation System Market sector is undergoing significant transformation, with substantial growth and technological advancements expected by 2031. According to a new in-depth market research report, the sector is poised for expansion, driven by various factors such as market size, share, and emerging This comprehensive report provides key insights into the Greenhouse Irrigation System market, exploring critical market segmentation and definitions .The study offers valuable insights into the competitive landscape, highlighting recent developments and geographical distribution across key regions. Expert competitor analysis provides a detailed understanding of market dynamics, offering strategic guidance for businesses and investors. Greenhouse irrigation system market is expected to expand at a compound annual growth rate of 8.80% over the forecast period of 2021 to 2028.

The considerable need to enhance agriculture production is the factor for the greenhouse irrigation system market in the forecast period of 2021 to 2028. Greenhouse irrigation systems are largely used to fulfill the watering supplies of a greenhouse farming system. These systems are appropriate for fruits, vegetable crops and flowers. Also these greenhouse irrigation systems are vital for the cultivation of healthy crop yield.



Source: https://www.openpr.com/news/3671167/greenhouse-irrigation-system-market-t-is-expected-to-expand-at