

## Net Zero Carbon Cycle, A New Future of Digital Textile

The Industrial Technology Research Institute (ITRI) launches the "2030 Technology Strategy and Roadmap" initiative (which includes "Smart Living", "Quality Health" and "Sustainable Environment") and plans the "2050 Net Zero and Sustainability" strategy all as means to help Taiwan move towards the goal of "2050 net zero carbon emission" . In 2022, ITRI will showcase the theme of "net zero carbon cycle, a new future of digital textile" in TITAS, with the following three major areas:

1. **Textile Materials:** decoloring and recycling of polyester fiber; low carbon manufacturing of microbial dye; textile with rapid heating capability; low carbon application of agricultural byproducts; low carbon recycling of circular knit fabric; design & customized proofing service; digital printing and dyeing of functional textile; eco-friendly textile chemicals; dyeable polypropylene (PP) fabric; highly rebound thermoplastic polyester elastomer (TPPE) fiber; antibacterial and antiviral fabric.
2. **Recycled materials:** chemical recycling of polyester; recycling, modification, and application of waste polarizer; eco-friendly polyphenylene sulfide (PPS).
3. **Water regeneration materials:** wastewater treatment and regeneration systems; ITRI aims to continue to diversify and innovate its technology and product portfolio, and have in-depth exchange with international industry and business partners.

For more information, please visit <https://www.itri.org.tw/>