

National Hydraulic Research Institute of Malaysia (NAHRIM)

STAKEHOLDERS DIALOGUE ON THE 12TH MALAYSIA PLAN, WATER SECTOR TRANSFORMATION Emergence Technology for Water Resources and Services Management

05 DECEMBER 2019

NAHRIM, A FINE INSTITUTE www.nahrim.gov.my

CONTENTS

- BRIEF INTRODUCTION
- AREAS OF R&D AND PROGRAM PROJECT TECHNICAL EXPERTISE
- MAKING FOR SUSTAINABLE WATER INFRASTRUCTURE



AREAS OF R&D AND SERVICES

WATER	
The second secon	
Water Cycle	

Rainwater

Surface Water

Groundwater

River / River Basin

Lake / Dam

COASTAL AND OCEANOGRAPHY



WATER ENVIRONMENT



River Estuary and Coastal Morphology

Oceanography

Jetty and Port

Hydrodynamic for Mangrove Replanting

Sea Level Rise

Integrity of Coastal Structures

Hydro Climate

Analytical Quality of Water

Water Treatment Technology

River Basin Research

Hydro-mechanical

National Lake Water Quality Standards (NLWQS)

Physical & Numerical Modeling

Data Collection, Analysis & Monitoring

Development of Hydrological Product and Technology

EMERGING TECHNOLOGY



N-HyDAA APPLICATION





NAHRIM, A FINE INSTITUTE

www.nahrim.gov.my

URBAN SPONGE CITY



URBAN SPONGE CITY



SPAH NAHRIM EFFICIENCY & MONITORING SYSTEM

- SMART RAINWATER DEVICE Real Time Data based on IOT + Data Analytics
- SOLVE –

www.nahrim.gov.my

NAHRIM, A FINE INSTITUTE

- Quantify rainwater harvested (yield) and usage (demand)
- Identify rainwater efficiency, savings and pattern (gender, toilet, building)
- Monitor leakage of system and instrument breakdown
- OUTCOME Monitoring, Assessment, Operation and Maintenance of rainwater harvesting system and SMART IOT devices for domestic and institutional sector.
- STAKEHOLDER NAHRIM / KATS (research data for rainwater availability, efficiency and pattern for domestic usage and small scale)







SMART & SUSTAINABLE WATER MANAGEMENT



CONTACT US

NATIONAL HYDRAULICS **RESEARCH INSTITUTE OF** MALAYSIA (NAHRIM) Ministry of Water, Land and Natural Resources (KATS) LOT 5377, Jalan Putra Permai, 43300 Seri Kembangan, Selangor Tel: 03-89476400 Fax: 03-89483044 www.nahrim.gov.my Emel: webmaster@nahrim.gov.my ro@nahrim.gov.my

MALAYSIA