



# TIDE TECHNOCRATS PRIVATE LIMITED

#### **ENGINEERS & CONSULTANTS**

Tide Technocrats is a pioneering innovative environmental and sustainability consulting, products and projects organization, based out of Bengaluru, India. Established in 1995, Tide Technocrats focuses on three primary areas for delivering sustainable impact: Solid Waste Management, Sanitation and Renewable Energy. Tide Technocrats has an experience of working in about 200 towns across the country and internationally in Asia and Africa in the last 25 years.

The company is empanelled by MoHUA (Ministry of Housing and Urban Affairs) under Swachh Bharat mission for providing consulting services for waste management. We are also partnering to the Sustainable Sanitation Alliance (SuSanA) a global organization focused on solving sanitation issues.

In 2017, TTPL was a winner of the Urban Labs Innovation Challenge by uChicago Tata Centre of Development for developing a treatment solution to prevent Agricultural waste burning in Punjab and Haryana: and finalist of the PFAN - USAID challenge for Smart Solutions for Adaptable Communities and Cities for creating a solution for non-sewered sanitation treatment. In 2018, Tide Technocrats is a finalist for the IHUWASH

Solid waste management	Sanitation	Renewable energy
Municipal waste handling collection,	Faecal sludge and	Pico and micro
transportation, processing and disposal	septage treatment	Hydro Energy
design and implementation support.	design setup and	
Preparing city level SWM plan/ DPR	operation	
Project management consultancy (PMC)	City sanitation plans	Biomass energy
for SWM projects		
Independent experts/ Advisory services/	In situ treatment	
Third party inspection to SWM projects		
Prepare design reports for composting,		
biogas, recycling systems, bioremediation,		
waste to energy and sanitary landfill		
facilities		
Training for operation and maintenance,		
efficiency improvement, handholding		
support and troubleshooting of existing		
SWM facilities		
Project implementation		

challenge organized by National Institute of Urban Affairs in Udaipur, Mysuru and Faridabad for developing a storm water drain rejuvenation system to reduce the impact of sewage mixing with water bodies. Our sister concern, Prakruti Renewable Power Private Limited was a Millennium Alliance awardee in 2014 for Pico hydro power generation in hilly areas.

#### **OUR PRIMARY FOCUS AREAS**





Renewable energy

Sanitation

### WHY PARTNER WITH TIDE TECHNOCRATS?

Tide Technocrats is a pioneering innovative environmental and sustainability consulting and services organization. Established in 1995, it is headquartered in Bengaluru, India. Some of the unique features of the organization are:

- · Nimble organization, on the cusp of growth
- · Technology innovators with focus on problem solving
- · On-ground experience in making solutions work
- · Focused on biosafety

## **STATEMENT OF CAPABILITY: SOLID WASTE MANAGEMENT**

We have executed over 40 projects in solid waste management across 170 towns in India and abroad.

Services provided by Tide Technocrats in SWM:

- Municipal waste handling, collection, transportation, processing and disposal design and implementation support
- . Preparing city-level SWM plan/DPR
- · Project Management Consultancy (PMC) for SWM Projects
- Independent experts/advisory services/third party inspection to SWM projects
- Prepare design reports for composting, biogas, recycling systems, bioremediation, waste to energy and sanitary landfill facilities
- Training for operation & maintenance, efficiency improvement, handholding support and troubleshooting of existing SWM facilities

# **List of projects: Solid Waste Management**

Sl. No	Project details (Name, Nature & Location)	Client	Year
1	Legacy waste management plan report for Chikkaballapur and Chintamani cities	Technology Informatics Design Endeavour (TIDE)	2021
2	Preparation of Detailed project report for MSW in Kargil municipality	BORDA	2021
3	Consultancy services for SWM DPRs for 28 municipalities in Telangana-Package-1	National Institute of Urban Management	2020
4	Consultancy services for SWM DPRs for 29 municipalities in Telangana-Package-2	National Institute of Urban Management	2020
5	Technical Improvement of operations at Chikkanagamangala SWM plant	Bruhat Bangalore Mahanagara Palike (BBMP)	2020
6	Technical Improvement of operation at KCDC Bangalore	Bruhat Bangalore Mahanagara Palike (BBMP)	2020
7	Design, Development, PMC for Establishment of sustainability park and allied services at KIADB land, East phase, Electronic city, Bangalore (ELCITA)  560100		2020
8	Review of SWM DPR prepared for Kishtwar Municipal committee	ULBs directorate Jammu	2018
9	Preparation of feasibility report and DPR for rehabilitation of defunct	Project development grand fund,	2018

	SWM site at Salem	TNUIFSL	
10	Preparation of city sanitation plan for 39 ULBs of Vijayapura, Bagalkote and Gadag districts	DMA, Karnataka	2018
11	Review of SWM DPR prepared for Doda Municipal committee	ULBs directorate Jammu	2018
12	Review of SWM DPR prepared for Bhaderwah Municipal committee	ULBs directorate Jammu	2018
13	Consultancy services for preparation of DPR and PMC for solid waste management in Khatu shyam ji, Rajasthan	Rajasthan state road development corporation,  Jaipur	2018
14	Preparation of SWM DPR for Thaliparamba, Ponnani and Valancherry towns in Kerala	Municipalities of Thaliparamba, Ponnani & Valancherry.	2018
15	Preparation of Solid waste management DPRs for newly formed 6 ULB of Belgavi District (Swachh Bharat mission) under Package 1	DMA, Karnataka	2018
16	Preparation of Solid waste management DPRs for newly formed 6 ULB of Belgavi District (Swachh Bharat mission) under Package 2	DMA, Karnataka	2018
17	Preparation of Solid waste management DPRs for newly formed 6 ULB of Belgavi District (Swachh Bharat mission) under Package 3	DMA, Karnataka	2018
18	Preparation of Solid waste management DPRs for 6 ULBs of Vijayapura district (Swachh Bharat mission) as part of Package 4	DMA, Karnataka	2018

19	Preparation of Solid waste management DPRs for 3 ULBs of Vijayapura district and 3 ULBs of Bagalkote district (Swachh Bharat mission) as part of Package 5	DMA, Karnataka	2018
20	Preparation of 3 <b>Biomethanation</b> DPRs for <b>Durg, Rajnandgaon, Jagadalpur</b> in Chattisgarh	State Urban Development Agency, Chattisgarh	2017
21	Preparation of 2 Bio Remediation DPRs for <b>Korba &amp; Raigarh</b> in Chattisgarh		
22	Consultancy services for supporting in Dumpsite reclamation of <b>Mulund</b> dumping ground, Mumbai	Garuda Aviation services, Mumbai	2017
23	Preparation of Solid waste management DPR for cantonment area, Barrackpore, West Bengal	Barrackpore cantonment board	2017
24	Preparation of SWM DPR for Kembhavi TMC of yadgir District	TMC Kembhavi	2017
25	Preparation of SWM DPR for Kakkera TMC of yadgir District	TMC Kakkera	2017
26	Preparation of SWM DPR for Nayakanahatti Town Panchayat under SBM, Chitradurga district	TP Nayakanahatti	2017
27	Preparation of Bio Remediation DPR for Vijayapura City Corporation, Karnataka	Bijapura City Corporation	2017

28	Preparation of Bio Remediation DPR and PMC for Vijayapura City Corporation, Karnataka	Bijapura City Corporation	2017
29	Baseline study for Innovation Hub for Urban WASH (IHUWASH) project	CMF/NIUA	2017
30	Toilet survey at Basawana Bagewadi	Nav anubhuti welfare society	2017
31	Conducting study and prepare a Detailed Project Report on solid waste management scenario and renewable energy in Kakinada City, Andhra Pradesh	EXRI, Japan	2016-17
32	Preparation of a solid waste management DPR for 500 TPD of MSW under Swachh Bharat Mission	MSGP Infratech Pvt Ltd, Bangalore	2016
33	Preparation of technical feasibility report for Fecal sludge management at Gangaghat and Mughalsarai	International water management Institute,  Colombo	2016
34	Preparation of Solid waste management DPRs for 3 ULBs of Tumkur District	Municipal Council- Sira, Tiptur, Pavagada	2016
35	Providing consulting services for setting up and operating an In house waste processing facility at Kempegowda International Airport Limited, Bangalore	Bangalore International airport Limited, Bangalore	2016
36	Preparation of SWM DPR under Swachh Bharat mission to Mysuru city	Mysuru city corporation	2016

37	Preparation of Solid waste management DPRs for 6 ULB of Chikkaballapur District (Swachh Bharat mission)	DUDC, Chikkaballapur	2015
38	Preparation of Solid waste management DPRs for 9 ULBs of Gadag District under Swachh Bharat mission	DUDC, Gadag	2015
39	Preparation of Solid waste management DPRs for 5 ULBs of Vijayapura District under SBM	DUDC, Vijayapura	2015
40	Preparation of Solid waste management DPRs for 3 ULBs of Chamraj nagar District under Swacch Bharat mission	Municipalities chamraj Nagar, Kollegal, Gundlupet	2015
41	Preparation of Solid waste management DPRs for 2 ULBs of Chitradurga District under Swacch Bharat mission	City Municipal council Challakere and Hiriyur	2015
42	Preparation of Solid waste management DPRs for 4 ULBs of Yadgir District under Swacch Bharat mission	4 Municipalities of Yadgir district	2015
43	Conducting study and prepare a Detailed Project Report on solid waste management scenario and renewable energy in Bangalore, Karnataka	EX Research Institute, Japan	2015
44	Preparation of Solid waste management DPRs for 4 ULBs of Kodagu District under Swachh Bharat mission	4 Municipal Councils of kodagu	2015
45	Preparation of Solid waste management DPRs for Krishnaraja nagara,	TMC, KR Nagar	2015

	Karnataka		
46	Conducting a study on the municipal solid waste management scenario including sewage sludge and renewable energy in Bangalore, <b>Karnataka.</b>	Ex Research Institute, Tokyo, Japan	2015
47	Conducting Fecal sample analysis and provide design for septic waste treatment facility for inclusion in the advisory document of the IWMI	International water management Institute, Colombo	2015
48	Project management consultancy (Transaction advisory &PMC) for setting up and operating a 5 MW Waste to Energy plant at Achan, Srinagar	Srinagar municipal corporation, Jammu & Kashmir	2015
49	Providing consulting services for preparation of DPR to arrive at service charges for out sourcing collection and processing of <b>animal waste</b> in own land in BBMP,	Bruhath Bangalore Mahanagara Palike, Bangalore	2015
50	Preparation of a Techno- economic feasibility report for setting up fecal sludge and MSW co composting facility at <b>Madhya Pradesh</b>	International water management Institute,  Colombo	2014-15
51	Preparation of a feasibility report for setting up a Construction and demolition waste processing facility at Bangalore, Karnataka	Bruhat Bengaluru Mahanagara Paliike ( <b>BBMP</b> )	2014-15
52	Providing end to end consulting and management services (DPR, Design, construction, installation & trial runs) for setting up a <b>500 TPD</b> MSW processing facility.	M/s MSGP Infratech Pvt ltd, Bangalore	2014
53	Preparation of Detailed project report for collection, transportation of the	Tumkur Municipal corporation	2014

	MSW in Tumkur and Request for proposal for selection of private operators in <b>Tumkur</b> and obtaining approval for the DPR.		
54	Preparation of a Techno economically viability report for setting up fecal sludge co composting plant at <b>Hyderabad.</b>	International water management institute	2014
	studge co composting plant at <b>Hyderabad.</b>		2014
55	Preparation of DPR for collection and transportation of municipal waste in	Gulbarga Mahanagara Palike	2013
	Kalaburagi.		
56	Preparation of DPR for Installation of Bio Methanation plant at	ВВМР	2013
	Nelmangala, Bangalore		
57	Preparation of a technical specification document for procuring vehicles	Kabul Municipality, Afghanistan	2013
	and equipment's for solid waste management services for Kabul		
	municipal corporation		
58	Preparation of DPR for setting up a biogas facility for Directorate of	DMA govt. of Karnataka	2013
	Municipal administration, Karnataka		2013
59	Providing technical consultancy for design of composting facility &	M/s Satarem Enterprises Pvt. Limited	2013
	common services for Bangalore and Hyderabad Integrated waste to		
	energy projects		
60	Providing 3 <sup>rd</sup> party inspection services to KCDC in setting up a 30 TPH	KCDC, Bangalore	2013

	MSW processing facility		
61	Providing advisory services for delivering framework for management of MSW in state of <b>Karnataka</b> .	M/S IDeCK	2013
62	Preparation of DPR for MSW collection, transportation and processing in <b>Srinagar</b> . Jammu and Kashmir	M/S Essel Infra projects, Mumbai	2013
63	Preparation of DPR for MSW collection & transportation, Preparation of RFP document and Time value of money for MSW collection and transportation	CMC Shimoga, Karnataka	2012
64	Preparation of RFP and concession agreement for establishing a waste processing facility for 600 MTPD MSW on DBFOT basis at Kannahalli, <b>Bangalore</b>	BBMP (Bruhat Bengaluru Mahanagar Palike)	2012
65	Support for project development for Waste to Energy Power projects at <b>Mumbai</b> .	Satarem Enterprise India Pvt Ltd	2012
66	DPR for setting up an ISWM facility Project activity also included designing efficient collection, transportation and disposal of solid waste generated	CMC Bijapur, Karnataka.	2012
67	Design & commissioning support for a MSW based biogas plant in <b>Bangalore</b>	M/s Terra Firma Biotechnologies	2008

68	Design, Project support, training and commission support for 9 compost plants at Uganda	World Bank, National Environment agency	2007
69	CDM support for 5 of the composting & largest integrated solid waste management projects at <b>New Delhi &amp; Kolkata</b> .	Climate Change Capital, United Kingdom	2007
70	Preparation of DPR on Integrated Municipal Solid Waste project for Sakleshpur Municipal Council	DMA, Bangalore	2010
71	Support for Commissioning of the Biogas plant at Terra Firma waste management site, Doddaballapura	TERRA FIRMA Biotechnologies	2010
72	Preparation of DPR for Municipal Solid Waste and Waste Characterization survey at shimoga	Shree Sridhara Technologies	2009
73	Training for setting up of a Compost Plant at UGANDA,	Sycom Projects, Delhi	2009-10
74	Project Management consultancy for Setting up of a Compost Plant at Mangalore	Rao Constructions Pvt. Ltd., Bangalore	2006-07
75	Design of Sanitary Landfill Site at Sreenivasa Gayatri Resource Recovery Ltd, Bangalore.	SGRR Ltd, Bangalore	2007
76	Feasibility Report on setting up and integrated solid waste management	Infrastructure Capital Group Dubai	2006
77	Designs of waste processing and Landfill facility for 4 towns of Karnataka	DMA, Bangalore	2005

78	Preparation of Detailed report for setting up of a bio methanation facility	CST, Indian Institute of Science	2005
79	Collection, Transport and waste process & disposal plan for Solid waste Management Kanakapura	Infrastructure Developmen (IDeCK)	2005
80	Comparative analytical study on solid waste management for Naintal, Shimla and Shillong	World Bank Unit New Delhi	2005
81	Detailed Design report of processing facility chikkamagalur for indo- norwegian envt program	KSCST- IISC	2005
82	Preparation of a DPR for Recovery of Energy from Municipal Wastes	KREDL Bangalore	2000
83	Assessment of quantity &quality of MSW in Bangalore	KREDL Bangalore	1999
84	Conducting study on Solid Waste Management in wards of Bangalore city.	Waste wise	1996
85	Consultancy services for Setting up of decentralized waste management initiative in Cuttack, Orissa	Orissa	1996

## STATEMENT OF CAPABILITY: FECAL SLUDGE AND SEPTAGE MANAGEMENT

1. Understanding the town- situation analysis of existing system in the town.

We have carried the city sanitation plan projects for 39 towns in Vijayapura,

Bagalkot and Gadag districts of Karnataka

Requirement of sewage network – Gaps identification of the town with existing system.
 We have carried studies across the Indian towns in Karnataka, Madhya Pradesh and other states.

**3. Different kinds of technology** – we have studied the different technologies biological and non-biological like thermal, Mechanized Dewatering and MBBR across India.

**4.** Implementation and O&M of the FSTP- we have implemented and operating more than 6 FTP plants across India and Lebanon.

Understanding on the existing town situation on FSSM

Understanding the requirement of FSSM for the town

Understanding on different technologies

Implementation of FSTP

Operation and maintainance of FSTP

## List of projects: Fecal Sludge and Septage Management

The ongoing projects being executed by Tide Technocrats are as Follows:

Sl.	Name of the project	Type of the project/ size	Name of Client	Year
No.		of the project		
1	Set up of omni processor:	15 KLD	United Nations	2020-ongoing
	Turning sewage into drinking		Children's Fund	
	water and electricity- Beirut,		(UNICEF)	
	Lebanon			
2	Construction, Commissioning of Fecal Sludge Treatment	12 KLD	Jharkhand Urban	2019 (+5yrs
	Plant of Capacity 12 m3/day at Chirkunda town		Infrastructural Development	operation) -
	(Jharkhand) and Operation and Maintenance for 6 years-		Company Ltd.(JUIDCO)	ongoing
	Call-3			
3	Construction, Commissioning of Fecal Sludge Treatment	8 KLD		2019 (+5yrs
	Plant of Capacity 8 m3/day at Gumla town (Jharkhand)		Gumla Nagar Parishad,	operation) -
	and Operation and Maintenance for 5 years		Jharkhand	ongoing
	G with the second of the secon	22 11 1 1 1 1 1 1 6		2010
4	Setting up of Faecal Sludge Treatment Plants (FSTPs) in		Swachha Andhra	2018- ongoing
	Urban Local Bodies of Andhra Pradesh for Package 4	Andhra Pradesh, India	Corporation, MA&UD	
	and 6 on Design Build Operate and Transfer (DBOT		Department, Government of	
	Hybrid Annuity) basis.		Andhra Pradesh	

5	Preparation of City Sanitation Plan (CSPs) for the below	39 ULBs of Karnataka	Directorate of Municipal	2018- ongoing
	mentioned 39 ULBs of Karnataka under package 3.		Administration, Karnataka	
	Small Pyrolysis Unit and Product Development and commercialization Planning -Phase 1 (Purpose: To support the development of a Technology solution and institutional framework to manage septage and fecal sludge from non-sewered toilets for safe treatment and	Setting up the Faecal sludge & septage treatment plants at 3 places Wai ,Narsapur Warangal.	Bill and Melinda gates Foundation (Wai Municipal Council, Swachh Andhra Corporation, Greater Warangal Municipal corporation)	2017-ongoing
6	Tide Technocrats OP-Small Pyrolysis unit and product development and scaling Phase 2 (Purpose to support the development of a technology solution and institutional framework to manage septage and fecal sludge from non-sewered toilets for safe treatment and disposal.	<ol> <li>Sanitation Resource         <ul> <li>Park at Wai</li> <li>(Maharashtra)- 70</li> <li>KLD FSTP</li> </ul> </li> <li>Sanitation Resource         <ul> <li>Park</li> <li>at Narsapur (Andhra</li> <li>Pradesh)- 15 KLD</li> <li>FSTP</li> </ul> </li> <li>Sanitation Resource         <ul> <li>Park</li> <li>at Warangal</li> <li>(Telangana)-</li> <li>15</li> </ul> </li> </ol>	3 Plants	

KLD FSTP	

Some of the projects Executed by Tide Technocrats are as follows:

Sl. No.	Name of the project	Type of the project/ size of the project	Name of Client	Year
1	Study of thermal FSTP under extreme cold weather conditions	Leh, Ladakh	Ladakh Ecological Development Group (LEDeG)	2021
2	Study on cost analysis for fecal sludge treatment plants (FSTPs) in India	India	NIUA	2018
3	Assessment of the WASH sector market Economy in the city of Mysuru and its impact on the regional economy.	Mysuru, Karnataka	NIUA	2018
4	Design and construction of fecal sludge treatment plant at Perinayakanapalyam	30 KLD	Indian Institute for Human Settlements IIHS	2018-20
5	Baseline study of cities for the project "Innovation Hub	Mysuru, Karnataka	SYCOM Projects Consultants	2017

	for Urban WASH Solutions"-Mysuru		Pvt Ltd	
6	Conducting Toilet survey	Basawana Bagewadi, Bijapur district, Karnataka	Nav Anubhuti Welfare Society	2017
7	To undertake a pre-feasibility assessment on a research demo trial for both technical and business model of fecal sludge- based palletization unit proposed at Hyderabad.	Hyderabad, Telangana, India	International Water  Management Institute,  Columbo.	2016
8	Conducting Fecal Sludge characterization and providing technical design report for septage management.	10 cities in India	International Water  Management Institute,  Columbo.	2015
9	Development and testing of a Pyrolizer and FSTP	India	Climate foundation	2014
10	Preparation of a Techno economically Feasibility report for setting up fecal sludge co composting plant at Madhya Pradesh.	Two clusters -  1) Closer to Bhopal (Budhni,	International Water  Management Institute,  Columbo.	2014
		Rehti and Shahganj and 2) Closer to Indore		

(Mahow, Rau and	
Gautampura).	



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