

対象国下水道分野における開発ニーズ(課題)

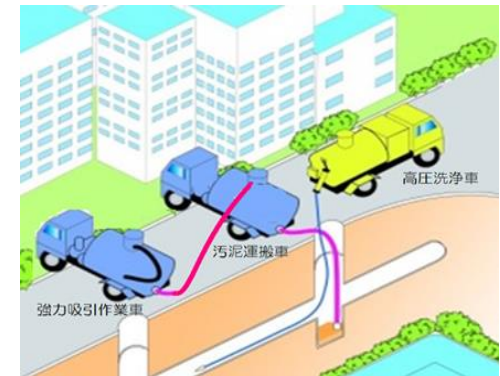
- 清掃機材の不足や現地の狭隘道路に適さない大型機材により、下水道清掃が不十分
- 作業員が下水管内で長時間作業を行うため健康被害が懸念され、作業環境の改善が必要
- 機材のメンテナンス等、維持管理能力強化が必要

調査概要

- 調査期間: 2025年5月~2027年11月
- 対象国・地域: インドネシア国ジャカルタ特別州、バンドン市、デンパサール市、ジョグジャカルタ市
- 調査概要: 強力吸引作業車と高圧洗浄車のデモ車を現地で実証し、清掃効果を検証する。案件化調査の結果も踏まえ、現地の架装・販売パートナーの検討や、Eカタログ掲載に向けた国産化率条件を調査する。製品供給体制を含めた事業戦略検討や最適ビジネスモデルの確立に向けセミナー開催や展示会出展を行う

提案製品・技術

- 高圧洗浄車: ホース先端に接続したノズルから噴射する高圧水により、下水・雨水管内を洗浄する
- 強力吸引作業車: 堆積した汚泥・土砂等を吸引回収し、運搬、排出する
- 汚泥運搬車: 吸引作業により回収した汚泥、土砂等を回収タンクに貯め、運搬、排出する



ビジネスモデル

- 官民(官: 下水道公社等、民: 製造工場等)を対象とし清掃車両・部品・アフターメンテナンスを販売
- 車体は現地メーカー、一部の部品は商社経由で調達し現地架装することで高い国産化率を実現。製品の性能上重要なパーツは日本国内製造・輸出
- 別途現地サービス工場と提携しアフターメンテナンスもサービスの一つとして販売

対象国に対し見込まれる成果(開発インパクト)

- 下水管のつまりとガス破損リスクの減少
- 安全で効率的・効果的な清掃作業の実現
- 強力なメンテナンス体制と車両の長期使用の実現
- 下水道維持管理コストの削減
- 雨季の冠水被害の減少
- 都市の安全で衛生的な市民生活の実現

Development issues in the country/sector

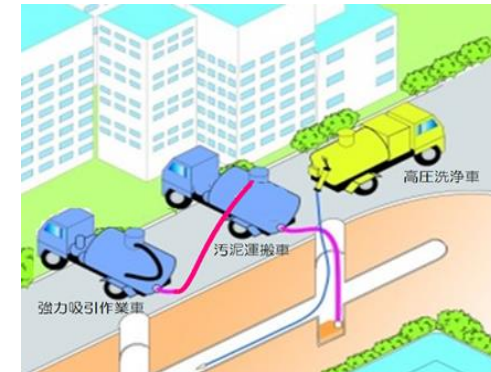
- Insufficient sewer cleaning due to cleaning equipment shortage and large equipment unsuitable for narrow local roads
- Necessity of the work environment improvement concerned about workers' health as performing in sewer pipes for long hours due to lack of sufficient equipment
- Necessity to strengthen equipment maintenance and management capabilities

Products/Technologies of the Company

- High Pressure Water Jet Cleaning Truck: Equipment to clean sewer and drainage pipes by spraying high pressure water through a nozzle connected to the end of a hose
- High Power Suction Truck: Equipment for suctioning, transporting, and discharging accumulated sludge and sand etc.
- Sludge Transport Truck: Equipment to store sludge and sand etc., which are collected by High Power Suction Truck, and to transport and discharge it.

Survey Outline

- Survey period: May, 2025~November, 2027
- Country/Area: DKI Jakarta, Bandung, Denpasar, Yogyakarta in Indonesia
- Survey Overview: Demonstration vehicles of High Pressure Cleaning Truck and High Power Suction Truck will be deployed to the site in order to verify cleaning effectiveness. Based on the results of SDGs Business Model Formulation Survey, a local assembly partner and a sales partner will be identified, and requirements of domestic production rate for listing the products in the E-catalog will be studied. Business strategies including product supply systems for wastewater management agencies and optimal business model will be considered by holding seminars and participating in exhibitions in order to develop the market.



Business Model

- Selling cleaning vehicles, parts, and maintenance services to public and private entities (Public: wastewater management agencies, etc., Private: manufacturing plants, etc.).
- The vehicle body is manufactured by a local manufacturer, and some parts are procured through a trading company and assembled locally to achieve a high domestic production ratio. Core parts that are important for product performance are manufactured in Japan for export.
- Maintenance service is also provided through partnerships with local service company.

Expected Social Impact in the Country

- Reduced risk of sewer clogs and gas damage
- Realization of safe, efficient, and effective cleaning operations
- Realization of strong maintenance system and long term use of vehicles
- Reduction of sewer maintenance costs
- Reduction of flood damage during the rainy season
- Realization of safe and hygienic citizen life in cities.