Detailed project plan:

Detailed project plan for a Technological solution for menstrual waste management aimed at heating, crushing, and separating plastic and cotton from sanitary napkins, with the goal of recycling the plastic and repurposing the cotton.

The plan includes project objectives, timeline, resources, and risk management for successful execution

1.Scope of project

- **Objectives**:
    - Develop a system to process sanitary napkins, separating plastic and cotton.
    - Recycle the plastic and find uses for the cotton, such as in manufacturing or as landfill cover.
    - Provide an eco-friendly alternative to traditional menstrual waste disposal.
- **Deliverables**:
    - Prototype system for separation.
    - Documentation on the system and process.
    - Samples of recycled plastic and repurposed cotton.
- **Boundaries**:
    - Focus is limited to sanitary napkin waste.
    - Initial implementation will be for a pilot test in a single location.

2. Stakeholders

- **Key Stakeholders**:
    - Project team (engineers, environmental experts)
    - Waste management authorities
    - Recycling companies
    - Local communities and NGOs.
- **Roles and Responsibilities**:

- **Project Manager**: Coordinates the project and oversees progress.
- **Engineering Team**: Designs and builds the system.
- **Environmental Specialist**: Advises on sustainability practices.
- **Waste Management Authorities**: Ensure regulatory compliance.

3. Work Breakdown Structure (WBS)

- **Phase 1: Planning (2 weeks)**
  - Feasibility assessment.
  - Define system requirements.
  - Identify potential partners for recycling.
- **Phase 2: Design and Development (8 weeks)**
  - Design system components (heating, crushing, separating).
  - Develop the water-based separation process.
  - Build a prototype.
- **Phase 3: Testing and Iteration (6 weeks)**
  - Test the prototype.
  - Refine the system based on results.
- **Phase 4: Pilot Implementation (8 weeks)**
  - Install the system at the pilot location.
  - Train personnel on operation.
  - Monitor and collect data.
- **Phase 5: Evaluation (4 weeks)**
  - Analyse pilot data.
  - Make adjustments as needed.
  - Plan for scaling up.

4. Timeline

Phase	**Duration**
Planning	2 weeks
Design and Development	8 weeks
Testing and Iteration	6 weeks
Pilot Implementation	8 weeks
Evaluation	4 weeks
Total Duration	**28 weeks**

5. Resource Allocation

- **Personnel**:
    - Project Manager, Engineers, Environmental Specialist.
- **Equipment**:
    - Heating equipment, crusher, water separation system.
- **Budget Estimate**:
    - Equipment and materials.
    - Personnel costs.
    - Pilot implementation expenses.

6. Communication Plan

- **Team Meetings**: Weekly check-ins.
- **Stakeholder Updates**: Bi-weekly progress reports.
- **Training Sessions**: For pilot site personnel.
- **Documentation**: Logs of all progress and test results.

This streamlined plan ensures the project remains focused on practical steps toward creating a sustainable sanitary waste management solution.