

# Project Design Phase – 1

## Proposed Solution

Team id: **PNT2022TMID52302**

Project Name: **Gas Leakage Monitoring & Alerting  
System for industries**

### Proposed Solution:

S. No.	Parameter	Description
1.	Problem Statement	<p>to find the gas leak and warn the user with alarms.</p> <p>The environment has a significant impact on people's health on a daily basis. The likelihood of a fire, explosion, or asphyxia depends on the materials' actual characteristics, such as combustibility and harmfulness. Recently, the frequency of fatalities brought on by gas cylinder explosions has increased. Such explosions are justified by the fact that using gas cylinders carelessly, with outdated valves, worn-out regulators, and subpar cylinders, all of which increase the risks.</p>

2.	Solution Description	<p>We have suggested a system that makes use of sensors and is able to detect gases like LPG, CO, etc. in order to have control over such dangerous conditions.</p> <p>In order to work effectively on major crises rather than worrying about monitoring or gas leakage, workers who are engaged in a busy industry and work with gas—either harmful or harmless—need a way to continuously monitor their gas pipelines and detect early if there is any leakage of gas in their surroundings. This will indeed reduce the manpower of that industry and foster peace.</p>
3.	Uniqueness	<p>Although there are several existing solutions to this issue, none have been able to meet client demands. low cast, dependability, and hazardous situation prediction.</p>
4.	Social Impact	<ul style="list-style-type: none"> <li>• Because many people are unable to detect gas leaks before a fire tragedy, this method will have a significant impact on society.</li> <li>• For the employees and the community that is close to or affiliated with the industry, our solution will be highly beneficia</li> </ul>
5.	Business Model	<p>Since industries are the primary audience for our solution, we have scheduled visits to inform them of the advantages of our products. This result enables a better comprehension of how modifications to one area of management can impact other areas of management.</p>
6.	Scalability of the solution	<p>Because the solution we've offered will be the foundation or starting point of any improved version, it can be integrated for additional future use. to build a proposed system with a safety component.</p>