**PROJECT DESCRIPTION**

**SIO Grafen: Demonstrator projects for commercial applications with 2D materials - 2024**

*All italic red help text should be removed before submitting.*

*The project description should be written with 12 pt black text in Swedish or English and be maximum 10 A4 pages beyond page 1 (page 1 includes “Project title”, “Project facts” and “Summary” in the template). In tables, 10 pt black text should be used.
Only the text in the project description will be evaluated. References to information in websites or similar will not be used in the evaluation process.*

# Project title

## Project facts

|  |  |
| --- | --- |
| Applied amount from Vinnova: | *SEK x,xxx,xxx* |
| Coordinator: | *organisation* |
| Project leader: | *name, e-mail address* |
| Other project participants: | *organisation, name, e-mail addressState at least one person for each organisation in the consortium* |
| Project period: | *Start and end date* |
| Area of strenght (one or more) | *Biotechnology, Composites, Electronics, Energy, Manufacturing, or Surface coatings* |

If the proposal is based on results from a previously publicly funded project, state from which financier and the project's record number: *financier, record number*

If a proposal with corresponding content has also been sent to - and awaits a decision - from another call / financier, enter call and financier: *call, financier*

## Summary

*Describe in running text the following points using a maximum of 1500 characters.*

* *Objective and goals.*
* *New or improved functionality to the intended application by adding 2D material.*
* *Potential - technical and commercial.*
* *Implementation - activities included in the project.*
* *Specify which of the goals in Agenda 2030 the project contributes to*

## Potential

### Project goals

*Describe the project's goals, the results that the project will achieve. Describe how the goal contributes to SIO Grafen's vision that Sweden should be one of the world's ten leading countries in developing and using 2D materials industrially.*

*Describe the type of graphene or other 2D material that the project will work with and describe the added functionality if brings to the intended application.*

*Describe the development of 2D materials that will be done in the project to improve the properties or functions of a material, a product, or a process.*

### Relevance for the competitiveness of Swedish industry

*Describe the problem that the project solves and why the project's results are important for the competitiveness of Swedish industry. Does the use of resources such as materials or energy decrease? Are new applications being created or applications with new or improved functionality? Is there a large potential market for the result? Or does the project create another advantage for Swedish industry's competitiveness?*

### Novelty in relation to state of the art

*Use 1-2 pages to describe the state of the art - the current state of research, technologies and applications – by providing an overview of published research and applications.*

*Include how your project is advancing the state of the art.*

### Contribution to Agenda 2030

*Describe the project's potential to contribute to Agenda 2030 after implementation by giving at least one concrete example of what the project adds to the goals or sub-goals described in* [*https://www.globalamalen.se/om-globala-malen/*](https://www.globalamalen.se/om-globala-malen/)*.*

## Actors

*In the table below, state all project partners (= participating organisations) with role and competence relevant for the project. Indicate which of the partners intends to implement the results of the project.*

|  |  |
| --- | --- |
| **Project partner** | **Role and relevant competence** |
|  |  |
|  |  |

*Complete the gender profile of the project in the table below.*

***NOTE: If the numbers do not match the commitment of the key people in the project, you should explain why it differs.***

|  |  |  |
| --- | --- | --- |
| Share of the project work that is expected to be performed by women.  |  | % |
| Share of women among the key people involved in the project. |  | % |
| Share of women in decision-making positions in the project (for example project leader, work package leader or steering group) |  | % |
| Comment: *Comment the gender balance and distribution of responsibilities and influence in the project between men and women.* ***NOTE: If the gender balance is not equal (40/60) in the application, motivate why****. Describe the partners' long-term goals linked to gender equality and how the project will contribute to achieve the goals*  |

### Value chain

*Describe value chain for the intended application. Clarify which parts of the value chain are included in the project and how the value chain will be developed during the project.*

## Feasibility

#### Project form

*Describe the technology readiness level (TRL) and maturity of the concept developed by the project. Motivate that it suits a demonstrator project.*

*State the TRL at project start and project end.*

#### Time and activity plan

*Describe the project's activities divided into work packages (WP) in the table below. Add a table for each work package.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Work package X:** *Title* | **Scedule** | **Cost** | **Partcipants** |
| *Start and end date* | *SEK XX* | WP leader: *WP-leader*Other participants: *partner X, partner Y …* |
| **Activities:** *Which sections are included in the work package and who carries them out*  |
| **Results:** *Deliverables at the end of the work package (for example reports, models, methods, tools, handbooks or other)*  |

#### Resources

*Complete the table below with ech partners planed budget in the work packages.
Keep the first and last row and column, add a row for each work package and a column for each partner.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Partner 1** | **Partner 2** | **…** | **Partner X** | **Cost WP** |
| **WP1** |  |  |  |  |  |
| **WP2** |  |  |  |  |  |
| **…** |  |  |  |  |  |
| **WPX** |  |  |  |  |  |
| **Cost Partner** |  |  |  |  |  |
| **From SIO Grafen** |  |  |  |  |  |

#### Utilisation of the result of the project

*Describe the plan for implementing the project result. What activities are left when the project is over? Which actor will lead the work with these activities?*

#### Communication

*Describe your communication plan for the project. What will be communicated? Which channels will be used?*

#### Risk analysis and management

*The 2D material area is still young. It is therefore not negative that a project contains risks. However, it is* ***necessary*** *that the project group has the capacity to manage the risks.*

*Describe the potential risks you have identified for the project in the following table.*
*Assess the probability for each risk to occur and the consequences if this happens from 1-5, where 1 =very low and 5 = very high.*
***Describe with words how these risks are managed in the project.***

*Keep the table head and add one row per identified risk.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk** | **Probability (1-5)** | **Consequence (1-5)** | **Management** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |