

Joint call by Formas and SVU for applications for grants for research and development projects in the area of Sustainable Water Management

Opening of the call: 2009-10-01

Last day of application: 2010-01-14

Time of decision: April 2010

The Swedish Research Council Formas and SVU (Svenskt Vatten Utveckling – Swedish Water & Wastewater Association – Research & Development) are launching a joint call for applications for grants for research and development projects in the area of Sustainable Water Management.

The mission of the Research Council Formas is to promote and support basic research and need-driven research of the highest scientific quality in the areas Environment, Agricultural Sciences and Spatial Planning. The research council is also responsible for information on research and research results. The mission of SVU is to sponsor research and development within the field of drinking water supply, sewage treatment and municipal water infrastructure. The focus for SVU is applied research and development important for the members of Swedish Water & Wastewater Association, e.g. the Swedish municipalities.

The research and development should contribute to the sustainable development of society - a development which implies that the finite resources of the planet and the environment are not consumed or degraded in an irrevocable manner, to the detriment of future generations, the environment and the viability of nature, economics, ethics, and social and cultural values are taken into consideration. A more detailed description of the areas of responsibility of Formas can be found in [Formas' strategies and research programmes](#). SVUs strategy is to be found at http://www.svensktvatten.se/web/Svenskt_vatten_Utveckling.aspx

The call has identified the following prioritised areas:

- **Climate impact – Technology for purification and protection of water sources.** The following issues of research and development have been identified. What impacts of climate change could we expect regarding surface- and groundwater? Do we need disinfection techniques adapted to a situation with worse water resources. Today there are no techniques available for strongly polluted water resources. How do we handle the impacts of climate change with more rainfall especially during winter and more extreme weather events, e.g. increased risk of faecal pollution and increase of NOM (humus) in raw water for drinking water supply?
- **Storm water run off at times of extreme precipitation.** Some issues of R&D have been identified: Extreme rains – risks, consequences and actions; Methods for planning and early warnings of flooding; local risk- and vulnerability analysis for

protection of flooding in rivers and lakes; Controlled flooding and a systematic treatment of storm water management; change of groundwater levels – analysis of its impact on drainage and surplus waters, impact on the structural stability of water distribution system and sewer pipes, and the impact on the risk of microbial contamination of drinking water.

- **Adaptation of sewer system to climate change** – Combined systems are directly impacted by high precipitation due to storm runoff. With more extreme rains, peak flow conditions can easily exceed the capacity of the transport system resulting in discharge of untreated wastewater. Another critical issue with respect to water pollution is by-passing of flow at wastewater treatment plants. There is also a substantial impact on separate system due to drainage water and rainwater from roof runoff, etc. Increased knowledge about the expected effects and strategies to handle climate impacts are necessary.

• **Energy efficiency and other actions to reduce climate change impact – Water treatment plants and waste water plants.** This a broad area and comprises for example optimisation of operation, development of the process, increased production of biogas and heat recovery. Regarding impact of climate change we can identify high emissions of methane and dinitrogen oxide (N₂O) gas – which are both strong greenhouse gases – from wastewater plants and treatment of sludge from waste water.

The criteria for the assessment and ranking of the applications are scientific and societal values for Formas' and SVU's areas of responsibility. Gender perspectives should be taken into account in project proposals where this is relevant. Grants may be used as Swedish co-funding of EU projects with an R&D orientation.

The earliest date of commencement of projects is 1 May 2010. Applications for funds may be made for not more than three years, 2010 – 2012. The main applicant must have been awarded her/his doctorate not later than 1 February 2010. Applications will be assessed by Formas' and SVU's joint expert committee, which is primarily made up of active and highly qualified researchers and experts on user's value. Formal decision will be taken by Formas' Council and SVU's board of directors in April 2010.

The budget for this call is **up to 9 MSEK/year** for projects up to 3 years of which annually Formas will contribute **up to 3 MSEK**, SVU **up to 3 MSEK** and industry/business partners of SVU **up to 3 MSEK** all annually. This includes overhead costs.

Formas Handbook 2009 contains a detailed description of Formas' policies and rules, the forms of project support and the application procedure, and information on how applications are assessed.

The call will close and the application has to be registered in Formas Direct **at 24:00 hrs, 14 January 2010**. Technical support from Formas and SVU is provided until 16:00 on the last day of application. Please make certain to submit your application in time before 16:00 in case you will need technical support. Applications are to be made via an online form on Formas' website, where also the Handbook 2009 is available for downloading.

www.formas.se

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