

Dr. Nannan Lundin

南南伦丁博士

Counsellor Science and Innovation (incl. Environment, Climate and Energy related policy issues)

科学创新参赞（包括环境、气候和能源）

Head of Section

科学创新处处长

Sweden-China Government- to- Government Energy Innovation Cooperation 瑞中政府间能源创新合作

-

An overview and way forward
概述和未来



EMBASSY OF SWEDEN

Beijing

Promoting innovation in energy technologies:
Opportunities for cooperation between EU and China
Asia Hotel, Beijing, 28 Jan. 2021

Section for Science & Innovation – An overview

科学创新处简介



- An (new) instrument for **Swedish Science and Innovation Diplomacy.**
瑞典科学创新外交(新)工具

- **Inter-departmental organisation and management structure:**
跨部门的组织和管理架构
 - Ministry of Enterprise and Innovation 企业创新部
 - Ministry of Education and Research 教育研究部
 - Ministry of the Environment 环境部
 - Ministry of infrastructure (incl. digitalisation and energy issues)
基础设施部 (包括数字化和能源)
 - Ministry for Foreign Affairs 外交部

Rationale for energy innovation cooperation with China (1) – Policy drivers

与中国在能源创新合作的理由(1) —— 政策驱动



EMBASSY OF SWEDEN

Beijing

Sweden to be one of the world's first **fossil-free welfare states**.

瑞典将成为首个无化石燃料福利国家

2030: 50% Energy efficiency improvement

能源效率提高50%

2040: 100% renewable electricity production

100%可再生电力生产

2045: Climate neutrality

气候中和



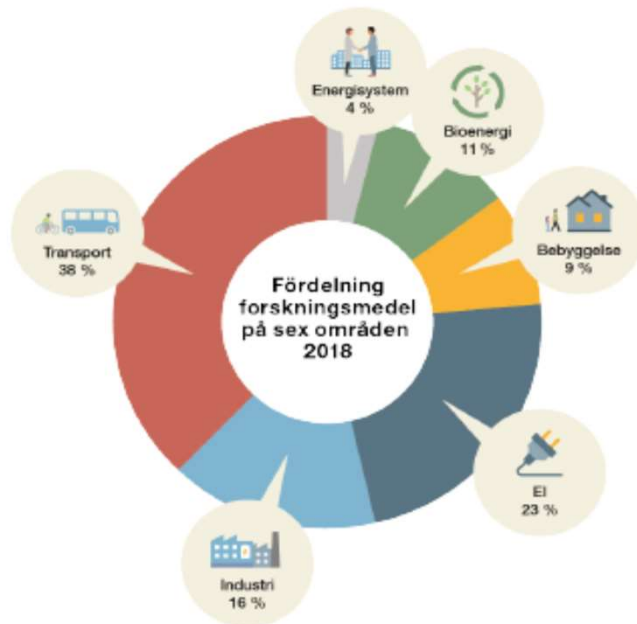
Source: Swedish Energy
Agency

- An energy system is based on **renewable energy, resource efficiency and circular material flows**. 基于可再生能源，资源效率和循环物质流的能源系统
- Innovation cooperation with China - a way to **lead by example AND make global impact**. 与中国的创新合作 - 以身作则与全球影响

Rationale for energy innovation cooperation with China (2) – Technology drivers

与中国在能源创新合作的理由(2) —— 技术驱动

Energy-related public funding **priorities** 7 **key solutions** for future transition 能源类公共基金重点领域 未来转型七大关键解决方案



Source: Swedish Energy Agency
(STEM)

- We do see many **common interests** between Sweden and China – **at both policy- and technology-level.**

我们确实看到了瑞典和中国的共同重点——政策和技术方面

- Digitization 数字化
- Electrification 电气化
- Energy storage 能源存储
- Negative emissions 负排放
- Circular material flows 循环物质流
- Social & economic sustainability 社会与经济可持续化
- Sustainable societies 可持续社会

Our instruments for energy innovation cooperation with China (1) – An overview from the past

与中国能源创新合作的工具（1）—— 走过路程



EMBASSY OF SWEDEN

Beijing

A **project-based approach** on innovation cooperation with China – some examples from "Eco-innovation program (2015 -2017)"

基于项目与中国开展创新合作 —— “生态创新项目”（2015-2017）

Energy in China-ISMEK – as a bridge to national priority energy areas:

中国能源-ISMEK—— 作为通往国家能源优先领域的桥梁

- Fossil-free vehicle fleet 无化石燃料车辆
- Power systems handling renewable electricity production 兼容可再生电力生产的电力系统
- Energy efficiency in buildings 建筑节能
- Increased use of bioenergy 增加生物能源的利用
- Energy efficiency in the industry sector 工业节能

Final selected and implemented projects: 最终入选和完成的项目：

- **Upgrade of cellulosic ethanol-biogas industry (co-funded)**
纤维素乙醇-沼气产业升级（共同资助）
- High energy efficiency and small-scale bioenergy combine in Jilin
吉林高能效与小规模生物能源结合项目
- Clean thermal system for new energy vehicles
新能源汽车清洁热系统

Our instruments for energy innovation cooperation with China (2) – A few thoughts for the future

与中国能源创新合作的工具（2）—— 未来展望



EMBASSY OF SWEDEN

Beijing

From a project-based approach to **a platform-based and system-oriented approach...**

从基于项目的合作转向**基于平台，面向系统的方法**

Sweden's 17 strategic innovation programs (SIP) (large-scale and long-term /12 years...)

瑞典17个战略创新专项（SIP）（大规模长期计划/12年）



Key questions主要问题:

- Which SIPs are interested in and have **capacity for an internationalisation process**?
哪一个瑞典国家战略创新专项有意愿，有能力来实现国际化进程？
- How to create a **“peer-to-peer” learning and cooperation structure** on the Chinese side?
如何在中方创建“一对一”交流和合作架构？

Thank you ! 谢谢 !
Nannan.Lundin@gov.se



OSI Beijing Blog



OSI Beijing Brochure