

# How national and local governments work together for decentralized energy transition in France

## - The example of district heating –



Local Renewables Conference – Nagano – 7th September 2017  
Stéfan Le Dû – Sustainable Development Advisor  
Embassy of France in Japan | Ministry of Ecological and Inclusive Transition



MINISTÈRE  
DE LA TRANSITION  
ÉCOLOGIQUE ET SOLIDAIRE  
[www.ecologique-solidaire.gouv.fr](http://www.ecologique-solidaire.gouv.fr)

MINISTÈRE  
DE LA COHÉSION  
DES TERRITOIRES  
[www.cohesion-territoires.gouv.fr](http://www.cohesion-territoires.gouv.fr)



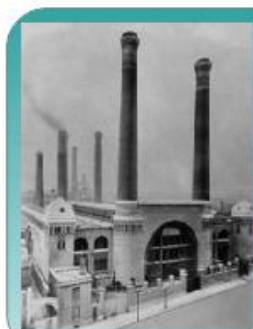
# 1. The example of district heating



MINISTÈRE  
DE LA TRANSITION  
ÉCOLOGIQUE ET SOLIDAIRE  
[www.ecologique-solidaire.gouv.fr](http://www.ecologique-solidaire.gouv.fr)

MINISTÈRE  
DE LA COHÉSION  
DES TERRITOIRES  
[www.cohesion-territoires.gouv.fr](http://www.cohesion-territoires.gouv.fr)

# History of district heating in France



Large cities with important heat demand (Paris, Grenoble, Strasbourg)

New networks using geothermal & heat from waste incineration



District heating develops in line with post-war major urban policies

Energy transition : more and more renewable energy in district heating



Source : Cerema – Pôle Réseaux de Chaleur

# Local actions & National support for renewable district heating projects

- **Local governments have the initiative.** Generally under PPP models, they choose to invest in :
  - Renewable heat generation systems (to replace fossile fuel systems)
  - Expansion and densification of existing networks
  - Creation of new district heating schemes (ecodistricts, rural areas...)
- **National government supports and regulates :**
  - Adaptation of regulatory framework to ease projects (thermal regulation, urban planning regulation, etc.)
  - Funding (subsidies, tax reduction)
  - Technical support from agencies (ADEME, Cerema)
  - (since 2010) Mandatory feasibility study for district heating in new urban development zones
  - (since 2015) Mandatory masterplan for district heatings older than 2009

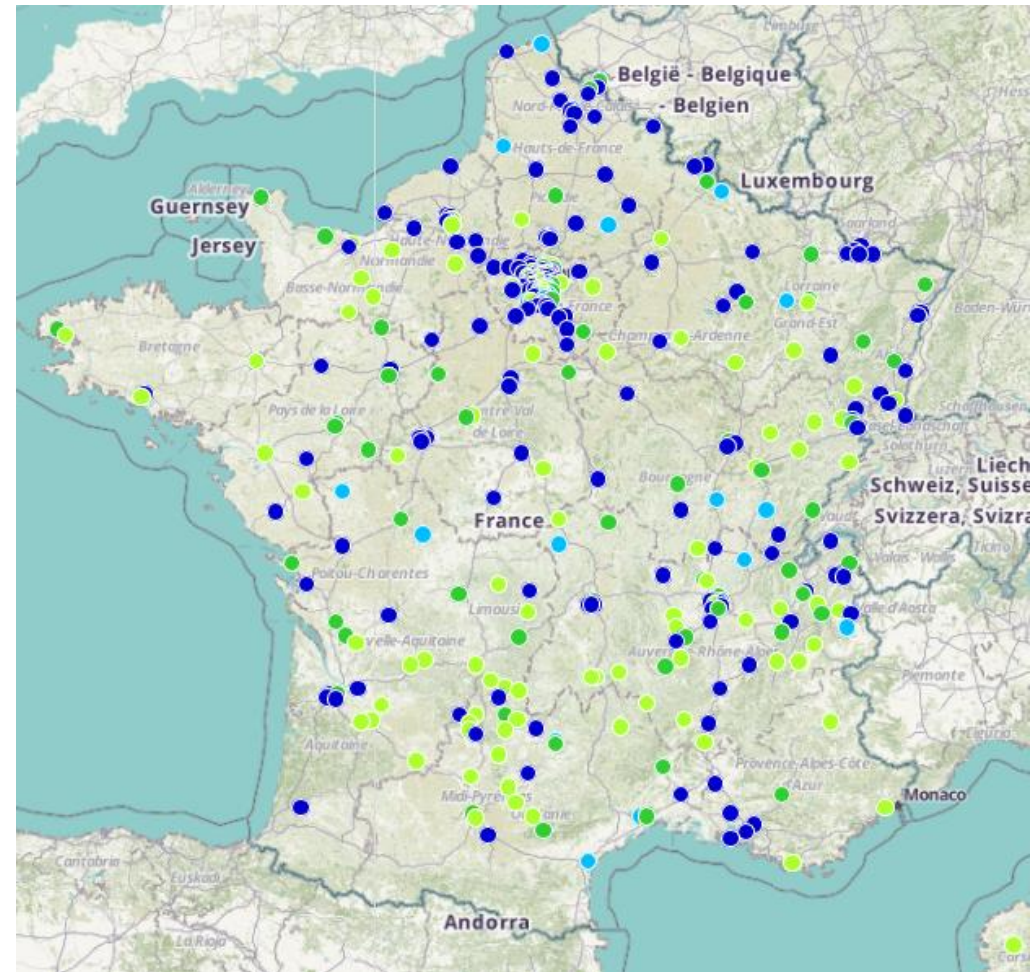
# Results of this local/national cooperation, over ten years

## 2005

- **400** district heating systems
- Renewable/recovery share: **25%**

## 2015

- **600** district heating systems
- Renewable/recovery share: **50%**



*District Heating Systems in France  
(source : [Cerema](#))*



## 2. General framework for local/national action for renewables



MINISTÈRE  
DE LA TRANSITION  
ÉCOLOGIQUE ET SOLIDAIRE  
[www.ecologique-solidaire.gouv.fr](http://www.ecologique-solidaire.gouv.fr)

MINISTÈRE  
DE LA COHÉSION  
DES TERRITOIRES  
[www.cohesion-territoires.gouv.fr](http://www.cohesion-territoires.gouv.fr)

# What can local governments do for renewable energy ?

- **Establish a local strategy for energy transition**
  - Mandatory climate-air-energy plan at regional level (focus on planning)
  - Mandatory climate-air-energy plan at city/metropolitan level (focus on management)
- **Integrate energy into urban planning tools and projects**
  - Initiatives for renewable energy in Ecodistricts (ex. : Biomass heating)
  - Urban zoning : delimitation of areas where construction is allowed only if renewables will be used in the new building
- **Invest in renewable energy projects**
  - District heating & cooling (networks and heat generation systems)
  - Renewable energy equipments on public buildings, public transport (ex. : biogas buses in Lille), public lighting, etc.

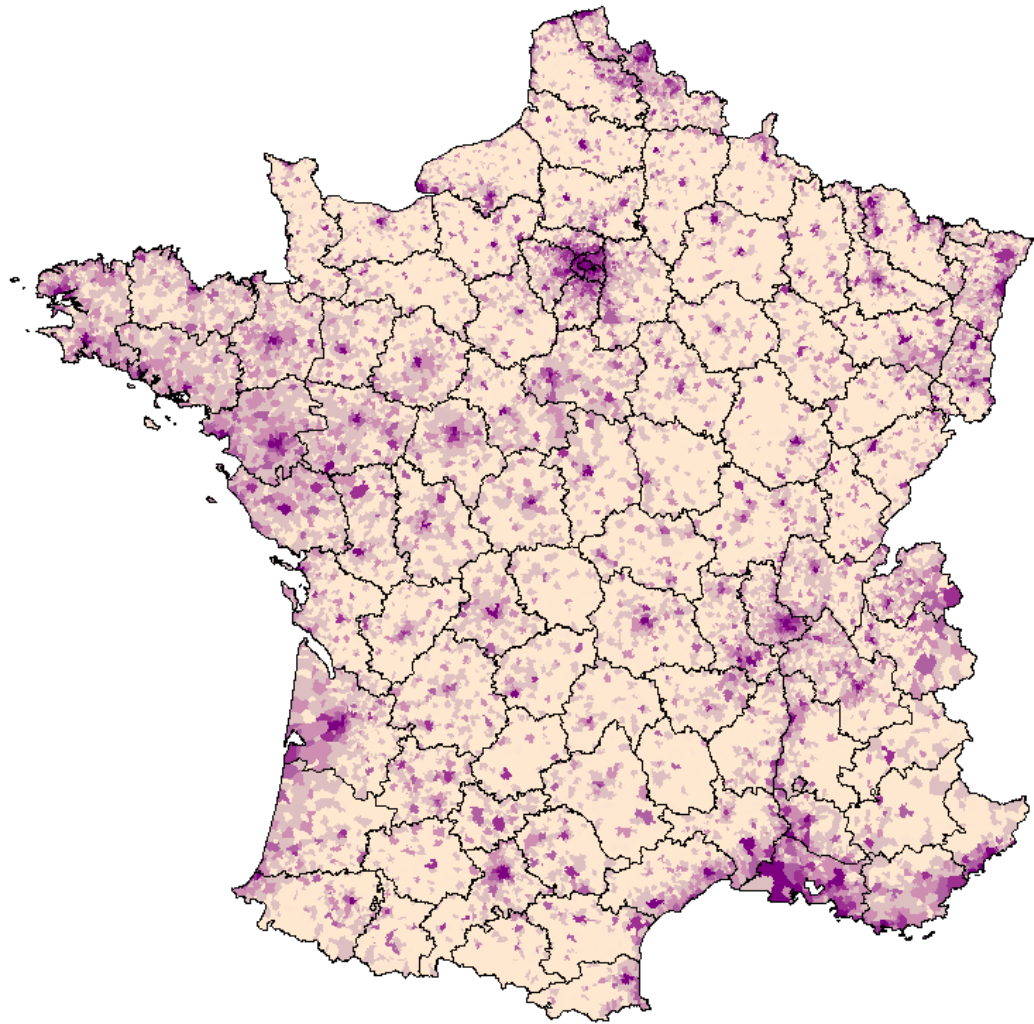
# How does national government support local action for renewables

- **Funding**
  - Ex. : Renewable Heat Fund ; Subsidies for « Positive Energy Territories »
  - Tax reduction, tax credit
- **Adaptation of legal framework**
  - To make renewable projects easier
  - To make some actions mandatory
- **Technical support to local governments**
  - Advice from agencies
  - Methodology, guidelines, working groups...

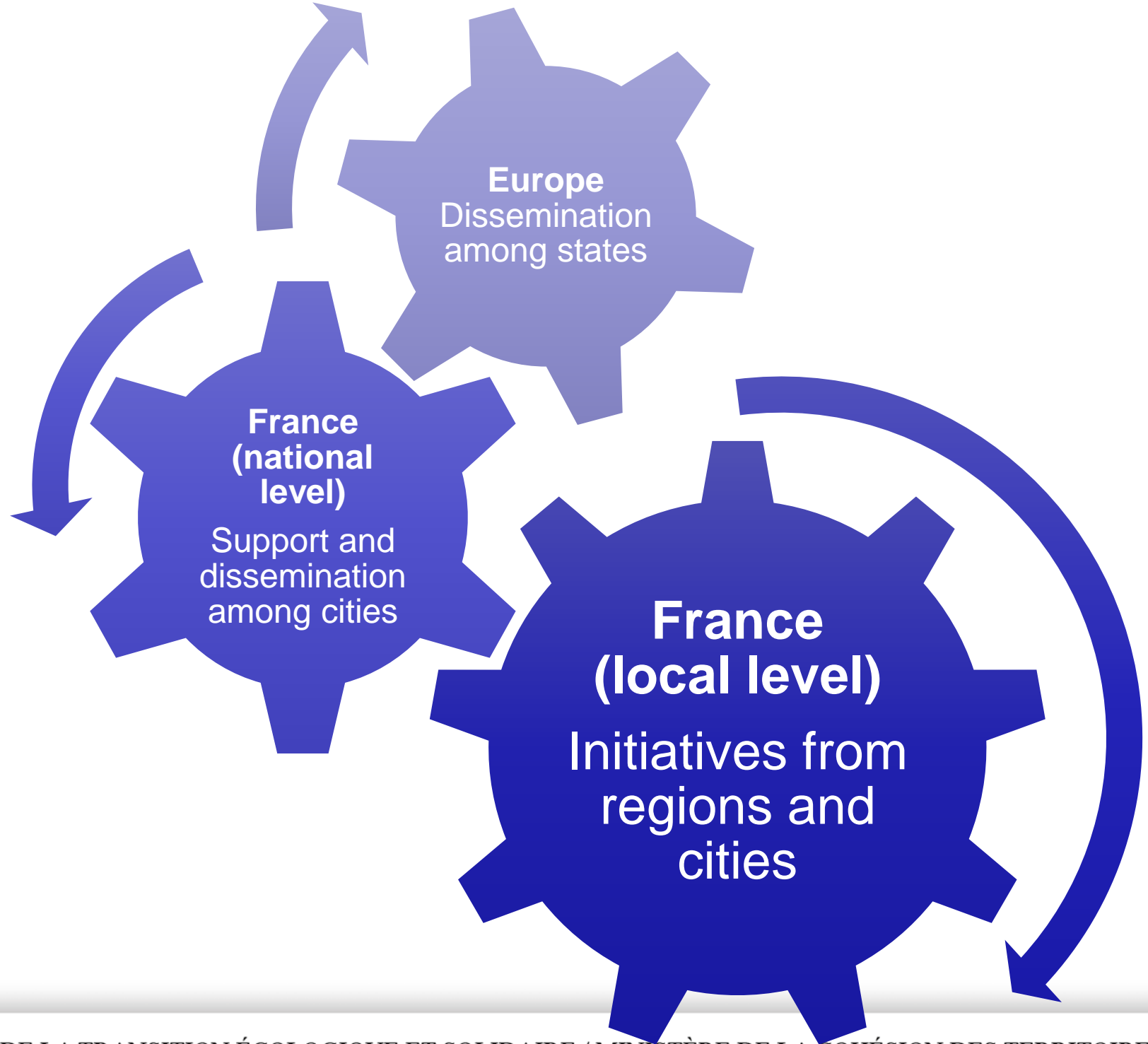


# How about Europe ?

- EU encourages all states to take initiatives, based of best practices across Europe
  - Example for district heating : EU Directive for Energy Efficiency (2012) makes it mandatory to establish **national « heat maps »**
  - Heat maps helps national and local governments to identify where district heating would be profitable



*French National Heat Map (source : Ministry of Ecological and Inclusive Transition / Cerema)*



## Contact :

mail : [sustainabledevelopment.tokyo@dgtresor.gouv.fr](mailto:sustainabledevelopment.tokyo@dgtresor.gouv.fr)

twitter : @FRTreasuryJAPAN



MINISTÈRE  
DE LA TRANSITION  
ÉCOLOGIQUE ET SOLIDAIRE  
[www.ecologique-solidaire.gouv.fr](http://www.ecologique-solidaire.gouv.fr)

MINISTÈRE  
DE LA COHÉSION  
DES TERRITOIRES  
[www.cohesion-territoires.gouv.fr](http://www.cohesion-territoires.gouv.fr)