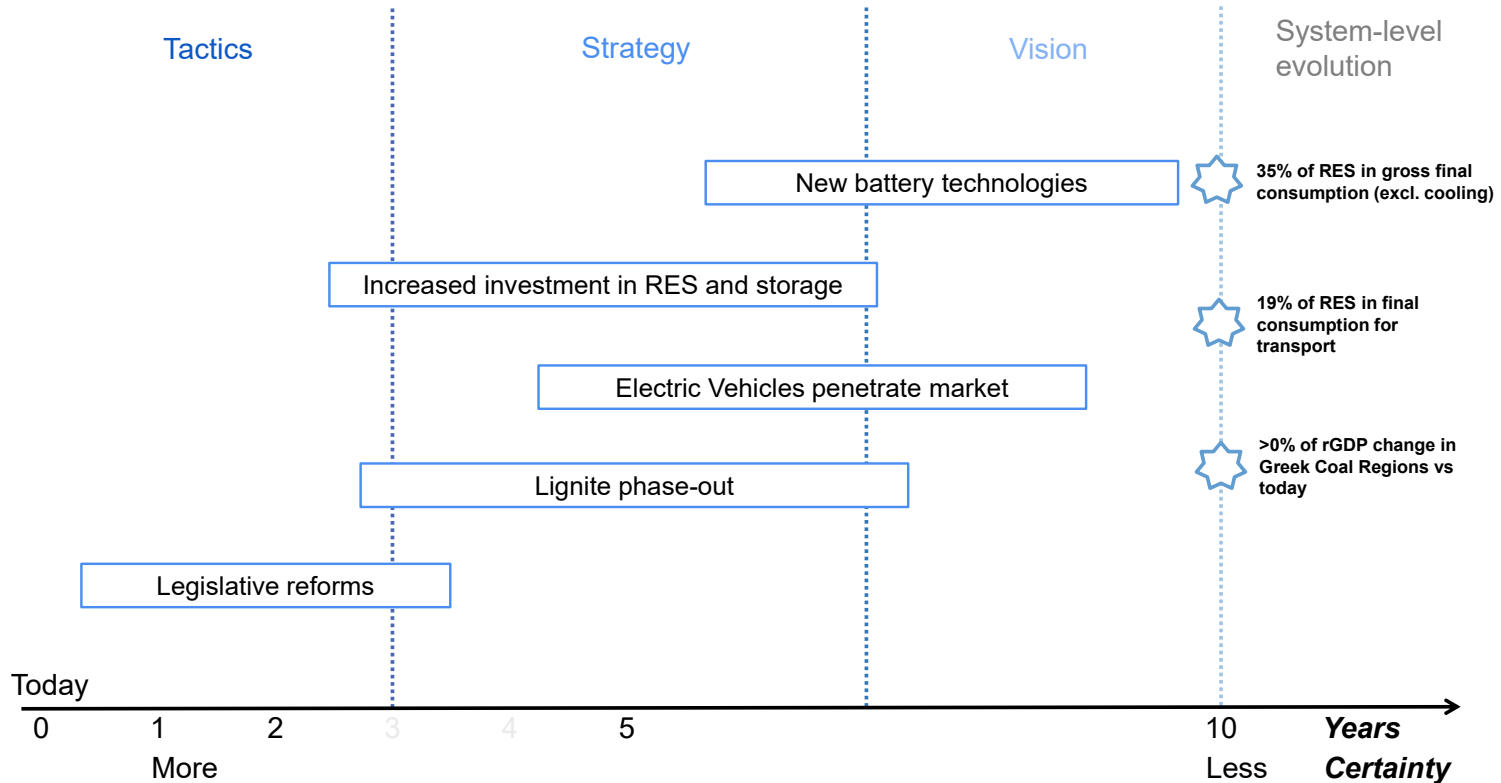

POINT Review Greece: **RES, Batteries & Applications** *Findings and recommendations*

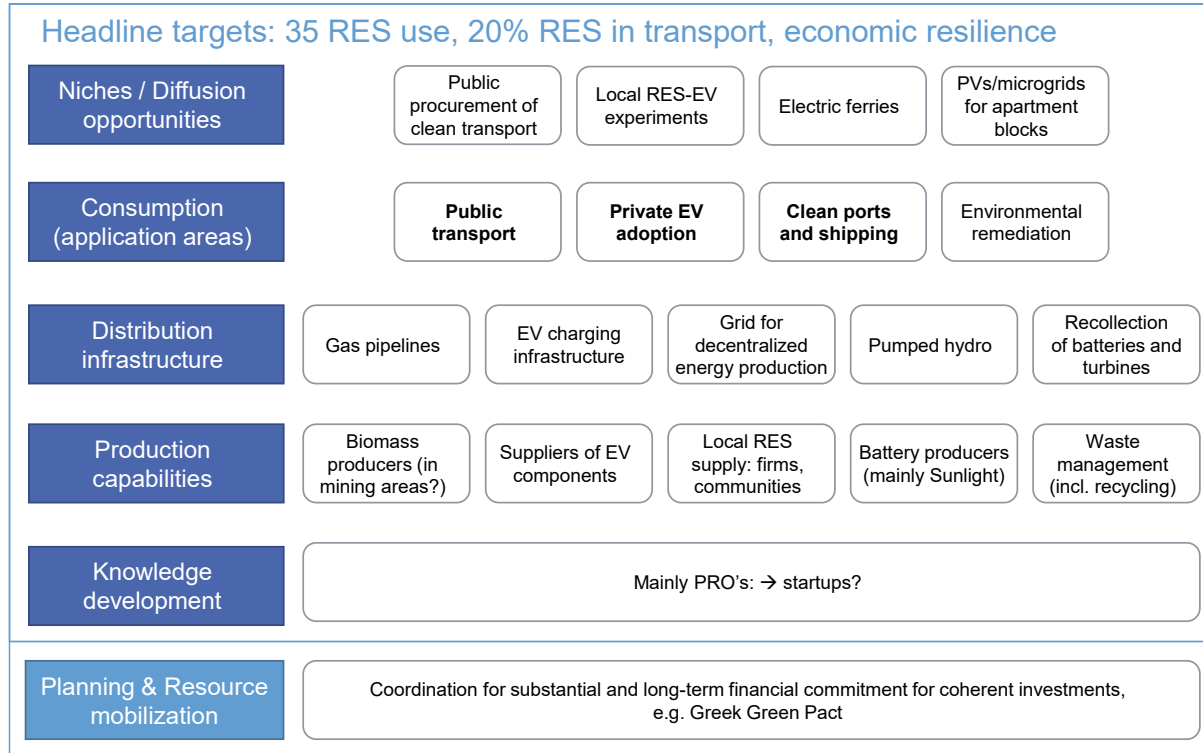
Matthijs Janssen (Utrecht University, NL)
Yannis Toliás (Innovatia Systems, GR)

15 July 2020

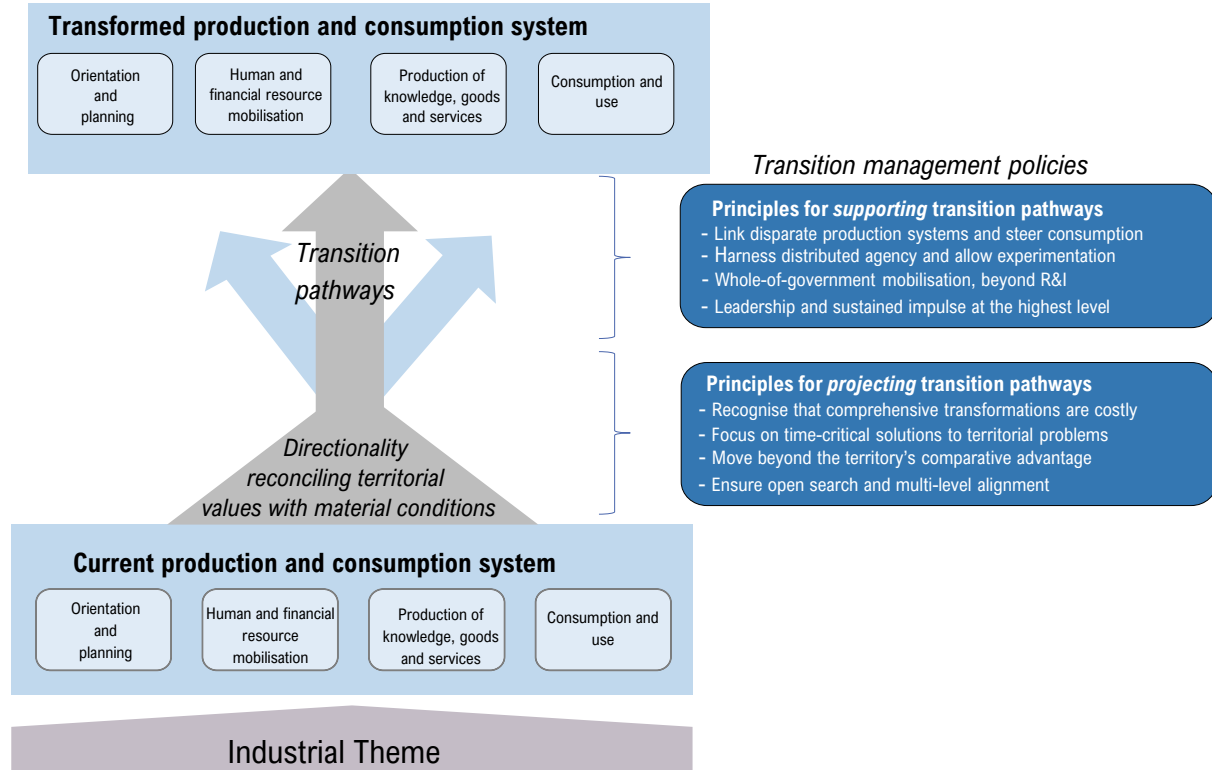
Industrial transition theme



Industrial transition 'ingredients'



Industrial transition approach



The desired system

Orientation
and
planning

- Extend **joint ministerial committee** and 'Green Pact' for electric mobility; e.g. via the use of **working groups** also addressing skills, businesses, regions.
- Consider **interregional learning** via e.g. scaleable **demonstrator experiments**.
- Enhance **industry involvement**, via **roadmaps** and consultation '**fora**'.

Human and
financial resource
mobilisation

- **Reverse brain drain** via support for development paths targeting local challenges.
- **Certify and accredit** the offer of **vocational training**.
- Establish **thematic vocational training centres**, (cf. CoVES)
- Use **EU funding schemes** linked to the European Green Deal Investment Plan (**EGDIP**).
- Intensify PCP and PPI.
- Develop **rating tools** and a **digital one stop shop**.

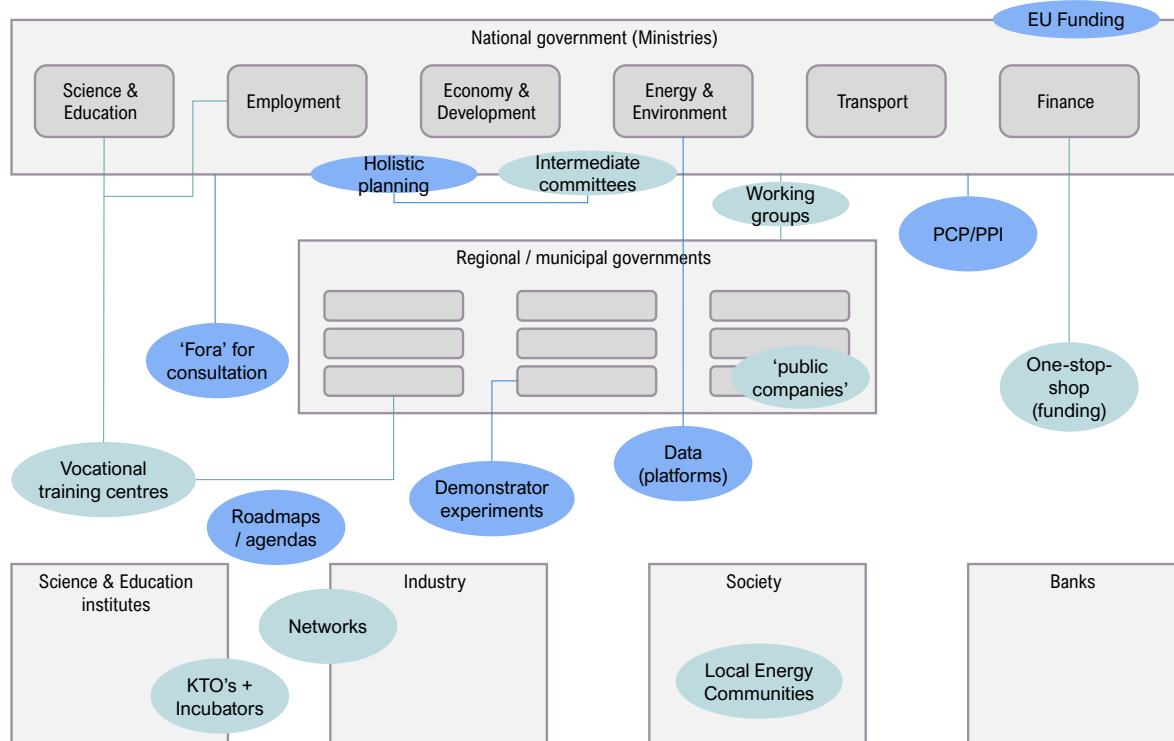
Production of
knowledge, goods
and services

- **Target FDI** at industrialisation related to RES technologies and digitisation.
- **Forge links** between energy and transport sectors/systems.
- Upgrade **public investments** that create demand and attract businesses and FDI.
- Enforce active **environmental regulations**.
- Create **regulatory sandboxes** for experimentations.
- Support **KTO's** and **incubators**.

Consumption and
use

- Enable **prosumers** and reform the **local energy community law** to avoid excesses.
- Support **energy citizenship** and link RES production to different application domains (e.g. private EV, electric boats)
- Exploit **niches with special demands**, like EV on islands.
- Expand **RES-based public transport** (like buses), e.g. via municipality-owned 'public companies'.

System-strengthening: Structures and Policies

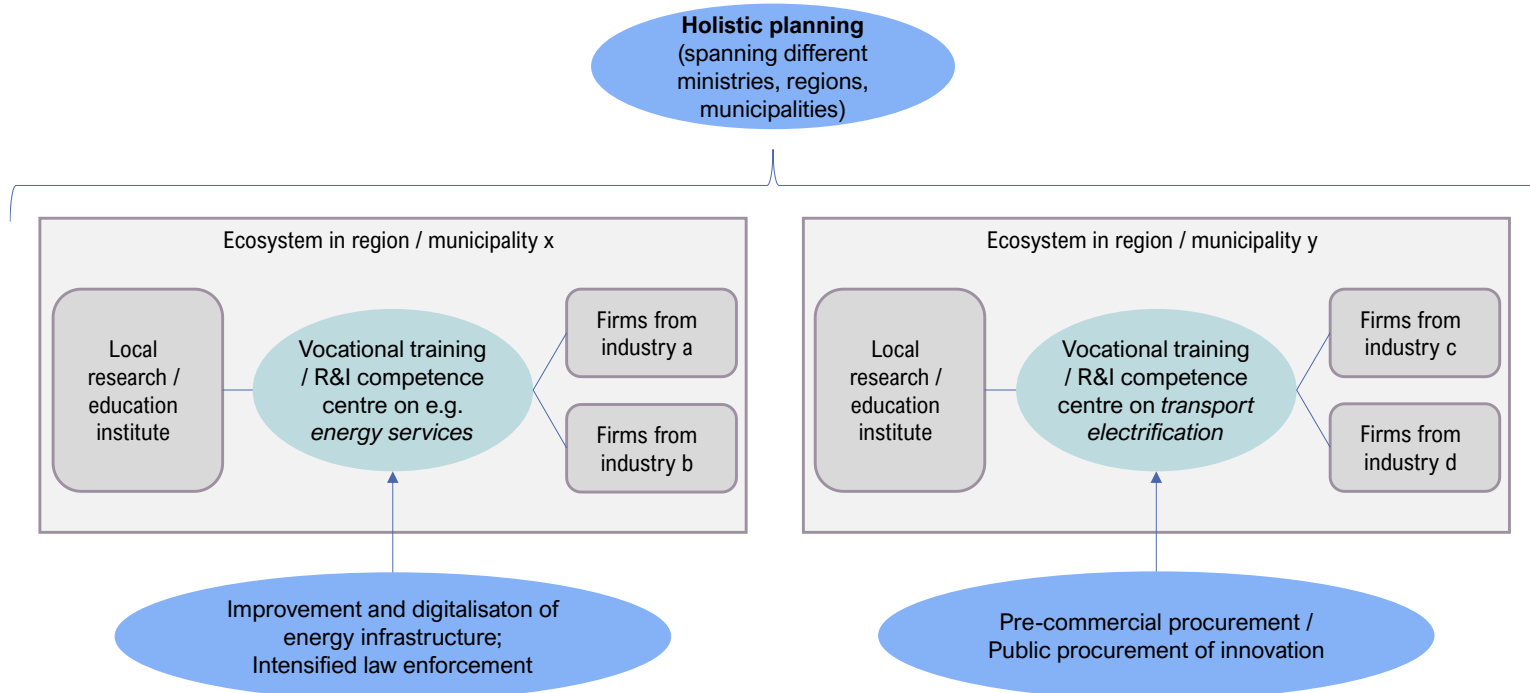




Leverage points

- **Holistic planning;** integrating existing and new Greek initiatives into a coherent strategy.
- **Catalysing innovation via procurement** by strengthening PCP/PPI capabilities.
- **Regional thematic ‘fieldlabs’ for vocational training and research & innovation,** combining skill and knowledge development (+ exchange)
- **Ecosystem development** around strong research organisations (e.g. CERT, ICCS/NTUA), industrial players, or existing clusters.
- **Smarter and better energy infrastructures,** by combining overdue grid maintenance with installing meters allowing for new solutions.
- **Enforcing (and improving) environmental protection,** to make sustainability pay off.

Interlinked leverage points



Support coalitions and managing resistance

Build support coalitions:

Deploy a 'whole of government'-approach, based on joined up policy making, boundary management, shared understandings;

- Develop **shared agendas**, specifying how ambitions and support measures of different policy departments interrelate. For the Min. of Economy & Development: *facilitate* roadmap writing processes.
- **Engage allying groups of stakeholders** articulating their interests, exploring differences and commonalities, aligning priorities, and endorsing the agenda. Extend EDP experiences towards e.g. education and citizen movements.

Manage resistance to change:

Mediate uneven regional growth by interconnecting transition paths;

- Consider transforming Western Macedonia into a demonstrator region for **environmental remediation** techniques, perhaps while replacing lignite for biomass.
- Tie **waste management** to reuse, recycling and/or disposal of **green technology waste**; e.g. repurpose photovoltaics, wind turbines from abroad, close loops around green technologies produced/used in Greece.



Experiments, reforms policies, instruments

- Devising **governance structures** that allow for the coupling of technological and socio-economic developments that could shape a coherent transition path, e.g. via:
 - Governance working group
 - Stakeholder round table discussions / Online stakeholder engagement
 - Online Research, Development and Innovation (R&D&I) Funding Guide
 - Collaboration spotting tool
- Extending Lifelong Learning Centres to **regional fieldlabs**, combining vocational training with public-private innovation and demonstration activities.
- Develop small-scale and low-cost **experiments**.
- Turn the NECP ambitions into a **mission**.

Catalysing the Greek transition (Summary)

- **Coordination process:**
 - Greek “Green Pact”; +Inspiration from examples like Dutch “Top Sectors”; +Catalan “Shared Agendas”; +Missions approach.
- **Public policy interventions:**
 - Legislation (e.g. microgrids, sandboxes); policy stability; enforcement of environmental regulation;
- **Enabling actions:**
 - Infrastructure (network and charging points); Skills (think ahead, (re)train, with/in businesses); demand management (smart meters, city-level standards, EV facilities, etc.); acceptance of RES (energy communities match with territorial values)
- **R&D and innovation actions:**
 - Knowledge transfer, PPPs, Public Procurement for Innovation (requires mostly capabilities, not money)

The POINT Greece Team



Matthijs Janssen

Utrecht University

Utrecht, NL

M.J.Janssen@uu.nl



Yannis Tolia

Innovatia Systems

Thessaloniki, GR

tolias@innovatiasystems.eu