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Work Package (WP) 1:
H2-ready for European and regional spatial planning and development Regional Development Agency Northwestern-Brandenburg

H2CE – Deliverable 1.2.3

submitted by Regional Development Agency Northwestern-Brandenburg (PP2 – REG)

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Summary

The action plan consolidates the results of two studies and a regional workshop into an implementation-oriented roadmap for scaling up hydrogen and flexibility in the Prignitz-Oberhavel planning region. It addresses the structural starting conditions of high renewable energy generation combined with limited grid capacities and the lack of supra-regional hydrogen connections, translating these conditions into six clearly structured fields of action with concrete measures.

The field of action *Governance, Coordination and Project Management* establishes binding structures through a regional coordination office and a regular roundtable format to bring together stakeholders, projects and demand, and to prepare investments.
The field of action *Infrastructure* focuses on the stepwise development of the flagship project "Modular Rail" along existing railway corridors, complemented by measures such as priority areas for electrolyzers, trailer-based transitional solutions, and a regional storage strategy.
The field of action *Coordination of Supply and Demand* centers on the systematic activation of corporate demand, the establishment of a producers' consortium to utilize curtailed electricity, and industrial pilot applications in order to overcome the chicken-and-egg problem.
The field of action *Regulation and Permitting* aims at legal clarifications, accelerated approval procedures, and a study on the macroeconomic costs resulting from the lack of hydrogen network connectivity.
The field of action *Financing and Participation* proposes a regional energy and hydrogen fund as well as cooperative participation models to enable investments and strengthen regional value creation.
The field of action *Society, Knowledge and Acceptance* includes dialogue formats, a digital energy map, and educational and demonstration projects to ensure transparency, participation, and long-term public acceptance.

Overall, the action plan provides a shared working basis for the region, municipalities, businesses, and other stakeholders to implement short-term projects, make better use of renewable surpluses, and at the same time establish a robust foundation for the region's future integration into supra-regional grid development and hydrogen infrastructure networks.

Introduction – Action Plan Development in the H2CE - Project

The transition towards green energy represents one of the most significant and far-reaching challenges of our century. Addressing climate change, securing long-term energy supply, and reducing dependency on fossil fuels require coordinated action across multiple governance levels. As a global challenge, the shift towards sustainable energy systems demands harmonised processes, forward-thinking strategies, and strong leadership at the international level. Yet global and European initiatives alone are not sufficient. Their successful implementation hinges on regional and local action, where the impacts of the energy transition are directly felt and where concrete measures must be realised. In this context, regional public authorities play a pivotal role: they are not only implementers of higher-level policies but also key actors in shaping regional visions, engaging stakeholders, and ensuring that the transition is tailored to local needs and development potentials.

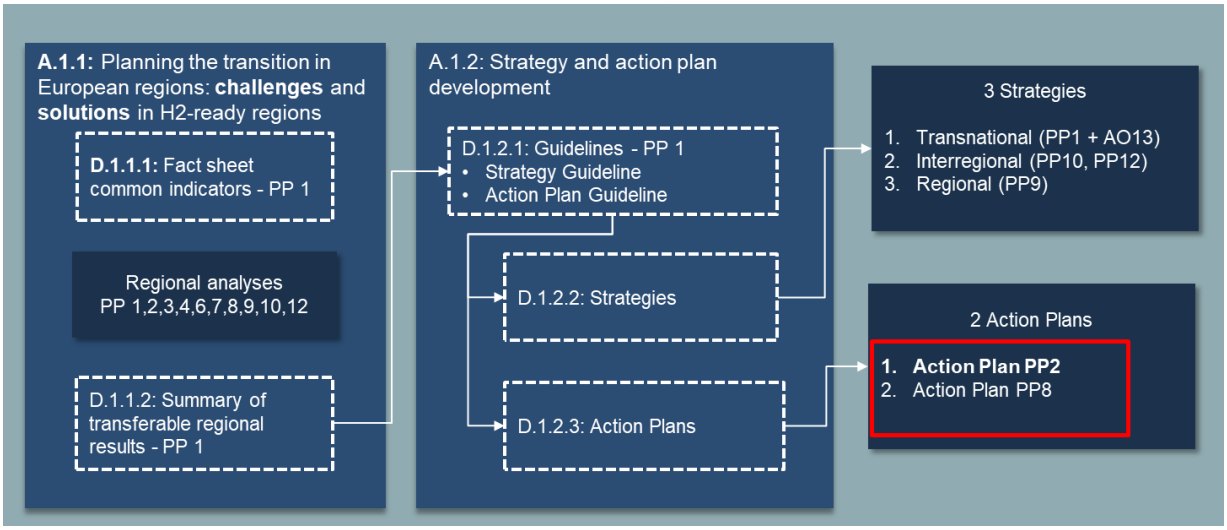
The Interreg Central Europe project H2CE aims to empower regions across Central Europe to become truly hydrogen-ready and to integrate hydrogen technologies into their long-term development pathways. To achieve this strategic objective, the project is organised into three complementary work packages:

- **WP1:** *H2-ready for European and regional spatial planning and development*,
- **WP2:** *H2-ready regions: Support mechanisms for energy system transition and participation*, and
- **WP3:** *Developing the Central Europe Hydrogen Network and Collaboration Platform*.

Work Package 1 provides the methodological backbone for regional hydrogen planning. It focuses on developing structured, replicable approaches for crafting regional strategies and action plans. Its two activities reflect this aim:

- **Activity 1.1:** *Planning the transition in European regions – challenges and solutions in H2-ready regions*, which analyses existing conditions, barriers, and opportunities,
- **Activity 1.2:** *Strategy and action plan development – upscaling into regional, transregional and transnational perspectives*, which supports regions directly in shaping their strategic documents.

Activity 1.2 specifically assists participating regions in developing coherent, evidence-based strategies and action plans. To ensure consistency and comparability across regions, a set of guidelines was prepared, outlining a structured approach to regional hydrogen planning and providing methodological support throughout the process.



This action plan for the region of Northwest Brandenburg has been developed on the basis of these guidelines. The region already benefits from an existing hydrogen strategy, which draws upon previous studies and local planning efforts. Building on this foundation, the present action plan is designed to move from strategic orientation to concrete implementation. It outlines targeted measures aimed at fostering the development of a robust regional hydrogen economy, strengthening regional value chains, and supporting Northwest Brandenburg's long-term transition towards a sustainable, resilient, and climate-neutral energy system.

Methodology

The development of this action plan followed a structured, multi-step methodology designed to ensure analytical robustness, stakeholder involvement, and alignment with the H2CE project framework. The following steps were undertaken:

1. **Regional analysis under Activity 1.1**
   As part of Activity 1.1, a comprehensive regional analysis was conducted to assess the hydrogen readiness of the Northwest Brandenburg region. This analysis applied a set of predefined indicators to examine existing capacities, infrastructural conditions, regulatory frameworks, and socio-economic factors relevant to the regional hydrogen transition.

2. **Preparation of two preliminary short studies**
   In advance of drafting the action plan, two targeted short studies were carried out. The first study evaluated the potential for hydrogen-related projects that could be realised independently of a connection to the national hydrogen core network. The second study examined the feasibility and regional relevance of a potential flagship project intended to serve as a lighthouse initiative within Northwest Brandenburg.

3. **Stakeholder involvement through the regional network "PROOH2V"**
   Regional stakeholders were actively engaged throughout the process through the established stakeholder network *PROOH2V*. A dedicated workshop was organised to gather regional perspectives, identify needs and opportunities, and validate preliminary findings. This participatory step ensured that the action plan reflects local priorities and benefits from the expertise of regional actors.

4. **Integration of stakeholder feedback into the draft action plan**
   The first draft of the action plan was presented to regional stakeholders for review and discussion. Their feedback — including comments on proposed measures, practical considerations, and strategic alignment — was thoroughly incorporated into the final version of the document. This iterative process strengthened both the relevance and the acceptance of the action plan within the region.

Introduction to the action plan

The Prignitz-Oberhavel planning region exemplifies a central tension of the energy transition: high potential and already significant expansion of wind and photovoltaic capacity coincide with limited grid capacities, frequent curtailment, and a still underdeveloped flexibility and hydrogen infrastructure.[1]. At the same time, the region is witnessing the emergence of initial concrete starting points for sector coupling and new value creation, for example through municipal off-takers, heating infrastructures, and the Falkenhagen Electrolysis Corridor project.[2]. Against the backdrop of the (currently) missing supra-regional hydrogen connection[3], a clear need for action arises: individual factors such as generation, demand, land availability, permitting, and implementation structures must be brought together in a way that enables short-term, implementable projects while simultaneously building robust evidence for later integration into supra-regional grid development processes.

The present action plan is designed as an implementation-oriented roadmap. It consolidates the identified potentials and bottlenecks and translates them into prioritized fields of action and measures that can be implemented at the regional level. Without concrete off-take structures and reliable project governance, infrastructure and generation projects remain fragmented and difficult to scale. In parallel, the flagship project “Modular Rail” introduces a multi-stage infrastructure approach along existing corridors, aimed at making regional generation surpluses usable. Methodologically, the action plan builds on the findings of previous work: this includes the results of two preceding studies and a workshop conducted within the framework of the project. The studies analyzed the legal and infrastructural framework conditions as well as the technical, spatial, and economic potentials of regional energy and hydrogen solutions in the Prignitz-Oberhavel planning region. The results were discussed and validated with regional stakeholders in a workshop and further developed into concrete implementation approaches. Based on this foundation, the action plan consolidates the identified needs for action and translates them into implementation-oriented measures.

The action plan is structured along six fields of action: Governance and Project Management; Infrastructure (including the flagship project “Modular Rail”); Coordination of Supply and Demand; Regulation and Permitting; Financing and Participation; and Society, Knowledge and Acceptance. Each field of action contains concrete measures with defined responsibilities, timelines, and target visions. Substantively, the plan covers short-, medium-, and long-term measures and provides a shared working basis for districts, municipalities, regional development agencies, municipal utilities, companies, and further partners in order to bring dispersed individual activities together into a coherent and stepwise implementable portfolio.

[1] Schalling u.a. (2022)

[2] HYPOWER Wasserstoffregion Mitteldeutschland (2025)

[3] Bundesnetzagentur (2024)

Field of Action 1: Governance, Coordination and Project Management

The development of regional hydrogen and energy infrastructure requires stable organizational structures and clearly defined responsibilities. In the Prignitz-Oberhavel planning region, numerous stakeholders from public administration, industry, the energy sector, and project development are involved. At the same time, personnel responsibilities within projects and institutions frequently change, meaning that specific knowledge is not permanently secured and existing resources can only be used with limited effectiveness. This hampers continuous project development and leads to friction losses in implementation.

The regional hydrogen ramp-up is also characterized by a pronounced coordination problem. Generation, demand, land availability, and infrastructure development are closely interlinked, but so far have not been systematically aligned. Potential producers are waiting for reliable off-take commitments, potential users for secure supply, while infrastructure projects require concrete volume and timeline specifications. Without a central entity coordinating and temporally aligning these elements, investment decisions are either postponed or significantly delayed.

In the absence of overarching governance structures, projects often develop in parallel and without coordination. There is a lack of strategic prioritization and a shared expansion logic to guide individual initiatives. This increases the risk of duplicated structures, inefficient use of resources, and competing approaches. Particularly in the case of complex and multi-stage projects, central project management is required to clarify interfaces and ensure consistent implementation. Complex infrastructure projects such as “Modular Rail” in particular must be centrally managed; otherwise, duplication or structural gaps may arise.

The large number of stakeholders involved in the region makes a coordinating structure necessary one that consolidates information, clarifies responsibilities, and organizes alignment processes. In this context, governance serves to ensure functional processes and the targeted implementation of measures.

Furthermore, a central governance structure is a prerequisite for the region’s prospective integration into supra-regional infrastructure and grid development processes. Only if regional needs are systematically assessed, bundled, and consistently communicated to external stakeholders, a solid foundation for decision-making at the state and federal levels can be established. Without such coordinated demand articulation, subsequent integration into the national hydrogen core network is not realistic.

Measure 1.1 – Regional Hydrogen Coordination Office

Description: A regional coordination office will be established to assume central project management functions and to serve as a contact point for companies, municipalities, and project developers. It will bundle advisory services, outreach to companies, land management, and funding coordination, thereby supporting the implementation of regional hydrogen and infrastructure projects. In addition, the Regional Coordination Office will oversee the further development and implementation of this action plan and ensure compliance with the defined timeline.

Actors: Responsibility lies with the Regional Development Agency Northwest Brandenburg (REG). The districts and municipal business development agencies will contribute to its implementation.

Timeline: The establishment of the coordination office is planned for the second quarter of 2026. Operational activities will commence in the third quarter of 2026.

Objective: The objective is to consolidate regional projects, create clear contact structures, and provide support to more than 20 companies per year in the development and implementation of projects.

Measure 1.2 - Round Table on Regional Energy Infrastructure

Description: A regular round table will be established to coordinate regional initiatives in the field of energy infrastructure. The focus will be on island grids, hydrogen projects, land availability, grid capacities, and measures to accelerate planning and implementation processes.

Actors: Responsibility lies with the Regional Development Agency Northwest Brandenburg (REG). Participants include the districts, municipalities, municipal utilities, regional networks, Deutsche Eisenbahn Service AG (DESAG), and grid operators.

Timeline: The round table will be launched in the third quarter of 2026 and will convene twice per year.

Objective: The objective is the joint coordination, prioritization, and strategic classification of regional infrastructure projects.

Interim Results:

- Assessment of existing infrastructure: Energy infrastructure will be recorded across sectors, with particular focus on available capacities, bottlenecks, structural challenges, and existing decarbonization plans.
- Planning: Based on the current situation, the round table will identify possible future scenarios. Particular attention will be given to potential sector coupling applications.
- Final report: The planning group will publish a concise final report by the third quarter of 2028.

Field of Action 2 – Infrastructure and Flagship Projects

The Prignitz-Oberhavel planning region is characterized by high levels of curtailment of renewable electricity generation. Existing grid capacities are insufficient to reliably transmit and utilize the volumes of electricity produced[4]. In 2021, approximately 170,000 hours of renewable electricity were curtailed in the region. Against this backdrop, there is a structural need for complementary infrastructures that enable the transport and utilization of energy beyond the existing electricity grid. The "Modular Rail" concept provides an alternative, linear transport and interconnection corridor for electricity, hydrogen, and other energy carriers.

At the same time, regional hydrogen projects have so far not been included in the national hydrogen core network, partly due to a lack of concrete demand data and unclear commissioning timelines. The Modular Rail concept addresses this situation by enabling a decentralized, stand-alone network infrastructure that can be realized independently of short-term core network integration, while remaining compatible with future supra-regional developments. By bundling generation, demand, and transport, it also creates the preconditions for the market viability of regional projects.

Along the existing railway corridors, both significant generation hubs and major demand clusters are located. This spatial configuration creates favorable conditions for coupling generation, storage, transport, and energy use along clearly defined axes. For the region, this provides the opportunity to establish a foundational infrastructure backbone that can be supported by various stakeholders and serve as a broadly consensual basis for further project development.

In particular, the regions of Pritzwalk and Falkenhagen can be meaningfully connected via rail due to their spatial location and existing transport corridors. The Modular Rail concept establishes the infrastructural basis to utilize regional generation surpluses, implement initial applications, and gradually integrate additional sites and use cases.

[4] Schalling u.a. (2022)

Measure 2.1 – Flagship Project Modular Rail

Description: The flagship project "Modular Rail" establishes a scalable, multi-stage infrastructure and supply system along the existing railway lines of DESAG. The objective is the stepwise development of a combined electricity and hydrogen corridor featuring decentralized energy hubs, modular generation and storage technologies, and multimodal refueling and charging infrastructure.

Implementation follows a cluster-based approach in several expansion phases:

- Phase 1 (Initial cluster Pritzwalk – Falkenhagen):
  Establishment of a hydrogen and mobility hub with a scalable refueling station, industrial connections, integration of power-to-gas and methanation plants, as well as applications in logistics and agriculture, including rail-based transport options.
- Phase 2 (Kyritz – Neustadt (Dosse)):
  Coupling of generation hubs in Neustadt with demand centers in Kyritz, including the assessment of power-to-heat applications, district heating network integration, and the inclusion of agricultural and commercial off-takers.
- Phase 3 (Neustadt – Neuruppin):
  Development of a continuous east–west corridor with high demand density in Neuruppin, particularly through district heating networks, CHP (combined heat and power) sites, and commercial and industrial areas. In parallel, preparations will be made for a potential future connection to the national hydrogen core network.

The modular approach enables gradual scaling from pilot applications and regional generation assets to the supply of larger commercial and heat-related consumers.

Actors: Lead responsibility lies with DESAG (concept development, infrastructure planning, railway engineering, and corridor analysis). Contributing partners include REG, the districts, municipalities, municipal utilities, electricity and gas distribution system operators, industrial partners (including Swiss Krono and Gefinex), regional networks, agricultural associations, and research institutions.

Timeline: The concept phase is scheduled for 2026–2027 and includes corridor planning, cluster analyses, and operational and logistics concepts. Implementation will begin in 2028 with the establishment of hydrogen hub infrastructure, grid interconnections, local test fields, and the modular expansion of individual clusters.

Objective: The creation of regional electricity and hydrogen corridors along DESAG railway lines as preparatory infrastructure for the region's future integration into the national hydrogen core network. The measure strengthens regional value creation, enables cross-sector coupling of electricity, heat, mobility, and industry, and enhances the resilience and flexibility of the regional energy system through decentralized, modular generation and consumption structures.

Infobox Phase 1: Initial Cluster Pritzwalk – Falkenhagen

Phase 1 focuses on the Falkenhagen–Pritzwalk section and leverages high renewable generation capacity (wind/PV), existing industrial consumers, and the logistically advantageous location along the A24 motorway and the DESAG railway line. The objective is to establish a scalable energy and mobility hub that can be gradually expanded toward Kyritz, Neustadt (Dosse), and Neuruppin.

A core component is the construction of a scalable hydrogen refueling station designed to potentially serve as a TEN-T corridor station in the future. The Hamburg–Berlin connection via the A24/E26 forms part of the TEN-T core network and is therefore subject to AFIR requirements, which stipulate that by 2030 publicly accessible hydrogen refueling stations must be available at least every 200 km. Currently, no such facility exists along this section. The station will be planned modularly to supply heavy-duty trucks, light commercial vehicles, and agricultural machinery. The integration of fast-charging infrastructure and battery storage into a comprehensive energy supply concept may be assessed as a complementary option.

Another key component is the connection of the Prignitz Industrial Park, where companies such as Swiss Krono and Gefinex have significant process heat and electricity demands. Existing businesses offer early off-take flexibility, while 155 hectares of undeveloped expansion areas represent substantial growth potential. Proximity to the motorway facilitates hydrogen distribution by road, while the railway line opens initial options for rail-based transport solutions (e.g., container logistics and trailer transport).

A central innovation field is the establishment of a hydrogen pilot area in agriculture. In cooperation with regional enterprises, such as the Blüssenberg agricultural cooperative, hydrogen-powered tractors and equipment can be tested. This enhances project visibility, opens a new application sector, and demonstrates the transferability of modular hydrogen technologies.

Pritzwalk-Sommersberg airfield offers the opportunity to develop a research project in small-scale aviation, testing hydrogen applications for light aircraft.

In addition, the potential integration of the Kyritz district heating network will be examined in order to incorporate power-to-heat solutions or synthetic gases into the regional heat transition. In parallel, an acceptance and communication program will be launched, using regional events such as festivals to make the energy transition visible and to involve the public at an early stage.

With this first expansion phase, a fully functional initial cluster will be established, providing both the technical and organizational foundations for subsequent development stages. From this starting point, the system can be extended along the railway corridors toward Kyritz, Neustadt, and ultimately Neuruppin, where significantly higher demand and district heating potentials exist. In this way, the region will gradually be connected to a continuous electricity and hydrogen corridor that is, in the long term, compatible with integration into the national hydrogen core network.

Measure 2.2 – Flagship: HyCapitlal

Description: As part of this measure, two to three high-capacity multi-fuel sites will be established in the Berlin/Brandenburg capital region, jointly addressing private transport, public transport, and heavy-duty traffic. At least one site will be designed to supply all relevant vehicle classes using alternative propulsion systems. This includes, in particular, the provision of hydrogen at 350 bar and 700 bar pressure levels, and prospectively also liquid hydrogen.

To enhance security of supply and system resilience, multiple sites will be implemented in order to create redundancies in the supply of logistics companies, freight forwarders, and bus operators, thereby avoiding bottlenecks in alternative fuels. The sites will be designed for trucks, vans, and buses, while also being accessible to private vehicles. The initial focus lies on public transport bus fleets, as secured demand already exists in this segment.

A key component of the measure is the installation of on-site hydrogen production via electrolysis at at least one location. Surplus renewable electricity will be used specifically to reduce curtailment of wind power installations. The electrolyzers will be operated in a grid-supportive manner and, through flexible load uptake, will contribute to stabilizing the electricity system. The hydrogen produced will be supplied both for mobility applications and for industrial off-takers in the region, particularly energy-intensive companies with decarbonization needs in heat and electricity.

Timeline:2026–2029. The first phase includes site selection, partner acquisition, and funding applications. From 2027/2028 onwards, infrastructure will be implemented step by step, alongside the commissioning of vehicles.

Objective: The objective of the measure is to establish a scalable and resilient hydrogen and multi-fuel infrastructure in the capital region in order to decarbonize bus, commercial vehicle, and logistics transport, while preparing for a broader market ramp-up of hydrogen mobility.

Measure 2.3 – Priority Areas for Electrolysis and Flexible Consumers

Description: To prepare concrete projects, regional curtailment hotspots will be identified and designated as priority areas for electrolyzers and other flexible consumers. These sites will be incorporated at an early stage into land-use and zoning plans and prepared through standardized planning approaches in order to accelerate permitting procedures.

Actors: The districts and municipalities are involved, together with a regional planning office and REG. Coordination takes place in close alignment with the Round Table on Regional Energy Infrastructure (Measure 1.2) and with the involvement of regional networks.

Timeline: The process will begin in 2026. Initial sites are to be identified and prepared by 2027.

Objective: The objective is to provide two to three prioritized, development-ready sites for electrolysis plants and other flexible consumers as a foundation for implementing regional infrastructure projects.

Interim Results:

- Identification of potential sites based on regional curtailment hotspots and existing infrastructure
- Consultation and technical coordination with regional stakeholders, particularly via the PROOH2V network
- Official designation of suitable priority areas within formal spatial planning instruments

Measure 2.4 - Information on Trailer-Based Logistics for Early Adopters

Description: To support potential early adopters of hydrogen, an information and orientation initiative on trailer-based hydrogen logistics will be implemented. The objective is to enable stakeholders without existing pipeline infrastructure to enter hydrogen use through a low-threshold approach. The measure builds on the results of the demand sprint (Measure 3.1) and prepares knowledge on technical, logistical, and organizational options for trailer-based hydrogen transport in a target-group-specific format.

Actors: Participants include municipal utilities, REG, the districts, logistics companies, the Chamber of Industry and Commerce (IHK), as well as selected providers and technical experts specializing in trailer-based hydrogen logistics.

Timeline: The measure will start in 2027, once the results of the demand sprint are available.

Objective: The objective is to provide potential early adopters with a sound decision-making basis for the short-term use of hydrogen via trailer logistics and to pre-structure initial application options before pipeline-based infrastructures become available.

Interim Results:

- Identification of potential early adopters based on surveys conducted within the framework of the demand sprint (Measure 3.1)
- Identification and assessment of suitable trailer logistics options (e.g., concepts such as those developed by Ambartec)
- Preparation and dissemination of information materials and organization of an information and exchange event for interested stakeholders

Measure 2.5 – Electricity Storage Instead of Curtailment

Description: Within the framework of this measure, the potential for deploying regional electricity storage systems as an alternative to curtailing renewable energy will be examined, particularly in cooperation with municipal utilities and other regional stakeholders. The aim is to demonstrate under which technical, economic, and organizational conditions electricity storage can contribute to system flexibility and which application options are viable at the regional level. The measure serves to prepare concrete projects and complements existing grid development planning processes, in which storage solutions have so far been given only limited consideration.

Actors: Participants include REG, municipal utilities, and private energy storage providers.

Timeline: The conceptual phase will take place in 2026. Implementation is scheduled for 2027–2028.

Objective: The objective is to identify and evaluate the potential for regional electricity storage deployment, particularly within municipal utilities, as a basis for sound investment decisions and the initiation of first pilot projects.

Interim Results:

- Assessment of regional energy demand and flexibility options among municipal utilities and other stakeholders
- Analysis of the technical and economic deployment options for electricity storage systems (battery storage and hydrogen-based storage)
- Commissioning of a potential study to an external expert consultancy
- Evaluation of cost structures and economic parameters relevant to municipal utilities
- Preparation and publication of results, and initiation of concrete project ideas

Field of Action 3 – Coordinating Generation and Demand

The regional hydrogen ramp-up is characterized by a pronounced chicken-and-egg problem. Potential producers, infrastructure providers, and off-takers each wait for binding commitments from the other stakeholders. Without targeted coordination between generation and demand, investment decisions do not materialize.

The region has significant potential in curtailed renewable electricity. However, these volumes can only be utilized if producers act in a coordinated manner and are able to provide reliable and predictable supply volumes. Individual, uncoordinated projects are insufficient for this purpose.

The lack of concrete demand data has so far contributed to regional hydrogen projects not being included in supra-regional planning processes, particularly the hydrogen core network. Without systematic demand development and robust off-take profiles, integration into the national system is not realistic.

In addition, many companies lack the personnel and technical capacity to independently engage with hydrogen technologies, procurement pathways, and regulatory requirements. At the same time, industry in the region in particular can act as an early pilot user and secure initial off-take volumes.

A successful market ramp-up therefore requires the parallel and coordinated development of both generation and demand. The aligned advancement of both sides is a prerequisite for implementing concrete projects, scaling regional activities, and preparing for future integration into supra-regional infrastructure.

Measure 3.1 – Demand Sprint: Activating 100 Companies

Description: As part of a time-limited demand sprint, hydrogen demand among regional companies will be systematically assessed. The survey will focus in particular on required volumes, quality specifications (purity levels), and preferred delivery formats. Outreach will be conducted on the basis of standardized one-pagers and personal consultations.

Actors: Lead responsibility lies with REG, supported by the districts and municipal business development agencies.

Timeline: The demand sprint will be carried out from the second to the fourth quarter of 2026 and will subsequently be repeated on an annual basis.

Objective: The objective is to activate approximately 100 companies, secure 10 to 15 Letters of Intent (LOIs), and establish a digital demand database as a foundation for further project development.

Interim Targets:

- Development of a standardized questionnaire to assess hydrogen demand
- Implementation of the survey among regional companies
- Evaluation of results and establishment of a structured demand database
- Categorization of companies according to particularly suitable “no-regret” application cases with high short-term feasibility
- Preparation and conclusion of LOIs as a basis for flagship projects

Measure 3.2 – Producers' Consortium (Wind Power Curtailment)

Description: To utilize curtailed renewable electricity volumes, a producers' consortium composed of regional wind farm operators will be established for the joint development of projects aimed at providing reliable and predictable electricity volumes for hydrogen production. The consortium enables the coordinated use of curtailed electricity and creates the preconditions for switchable loads in accordance with Section 13k of the German Energy Industry Act (EnWG) ("Use Instead of Curtailment 2.0").

Actors: Participants include regional wind farm operators, REG, municipal utilities, and project developers.

Timeline: The conceptual phase will take place in 2027. Implementation is planned from 2028 onwards.

Objective: The objective is to bundle curtailed electricity volumes into a reliable large-scale supply, both to reduce curtailment and to provide verified volume commitments as a basis for future integration into the national hydrogen core network.

Interim Targets:

- Identification of potential participating wind farm operators
- Development of an implementation and organizational concept for the producers' consortium
- Support and guidance for the consortium in preparing and submitting funding and project applications

Field of Action 4 – Regulation and Permitting

The implementation of hydrogen and infrastructure projects depends significantly on regional planning and permitting processes. Districts and municipalities are responsible for land allocation and zoning procedures. Without early and coordinated regional site preparation, projects cannot be developed or brought to approval. In addition, regional actors directly influence the speed of permitting procedures. Through coordination, preliminary consultations, and standardized approaches, procedures can either be accelerated or delayed. Companies are generally not in a position to manage the complex regulatory approval requirements on their own. They require guidance, advisory support, and assistance at the regional level.

Whether projects reach permitting maturity is often determined within regional processes, for example during the preparation of expert assessments, grid connection evaluations, or environmental impact reviews. Only projects that complete these steps in a structured and comprehensive manner are able to secure funding or be included in supra-regional planning processes.

At the same time, it is the responsibility of the region to develop coordinated positions and present them to state and federal authorities, particularly with regard to regulatory clarifications or simplified procedures. Many of the existing barriers are not legislative in nature but rather organizational, and can be addressed through regional coordination and structured processes.

Without this field of action, the remaining measures of the action plan cannot be implemented. Infrastructure development, generation capacity, and demand expansion are directly dependent on regulatory and permitting frameworks and would be blocked without corresponding regional preparation.

Measure 4.1 – Regulatory Clarification for On-Site Customer Installations and Sector Coupling

Description: The objective of this measure is to create legal clarity for the combination of renewable electricity generation, electrolysis, and additional flexibility applications. Unclear regulatory boundariesparticularly in the areas of customer installations, grid charges, and the classification of sector-coupled applications currently represent a significant barrier to investment. The region will therefore initiate a coordinated process to consolidate existing uncertainties, clarify practical interpretation issues, and address these matters at the state and federal levels.

Actors: REG, the districts, and political representatives at the state and federal levels.

Timeline: As soon as possible.

Objective: To establish legal certainty for the combination of photovoltaic generation, electrolysis, and additional flexibility options as a foundation for investment-ready projects.

Measure 4.2 – Simplification of Permitting Procedures

Description: The objective of this measure is to significantly shorten permitting procedures for hydrogen and flexibility projects. Suitable sites will be identified and prepared at an early stage through spatial planning instruments, including the designation of special-use areas and the standardization of zoning procedures. Preliminary coordination between municipalities, districts, and competent authorities will allow review processes to be bundled and planning risks to be reduced. This creates reliable framework conditions for project developers and accelerates the implementation of investment-ready projects.

Actors: Municipalities, districts, and REG are involved. Responsibility lies with the authority granting the respective permit.

Timeline: Start in 2026; first effects expected from 2027 onwards.

Objective: Reduction of permitting timelines for relevant projects by up to two years.

Interim Targets (Support within the Permitting Process):

- Preparation of a permitting guideline for hydrogen and flexibility projects
- Regular exchange with permitting authorities and relevant administrative bodies
- Appointment of a central contact person to accompany project developers throughout the permitting process

Measure 4.3 – Study: "Macroeconomic Costs of the Missing Hydrogen Pipeline Connection"

Description: This measure comprises the commissioning of a study to quantify the macroeconomic costs arising from the absence of a supra-regional hydrogen connection in the region. The analysis will examine, among other aspects, losses resulting from renewable energy curtailment, redispatch costs, foregone investments, and missed regional value creation opportunities. The results are intended to provide a robust assessment of the structural disadvantages associated with the current infrastructure situation.

Actors: A research institute commissioned by REG.

Timeline: Short-term start; completion within 2026.

Objective: To create a robust, evidence-based argument to support political decision-making and to serve as leverage for the region's prospective integration into the national hydrogen core network.

Interim Targets:

- Conducting a tender procedure for commissioning the study
- Technical supervision and support of the study process
- Activation and involvement of the PROOH2V network for expert feedback and dissemination
- Public presentation and discussion of the results

Field of Action 5 – Financing and Participation

The development of regional hydrogen projects involves high upfront investments and represents a significant financial hurdle, particularly for small and medium-sized enterprises. Equity capital is often insufficient, while uncertainties regarding future costs, revenues, and regulatory framework conditions further complicate investment decisions. Without targeted financial support, many potentially viable projects remain stuck in early planning stages.

At the same time, existing funding instruments are complex, fragmented, and difficult for individual companies to access. Regional coordination is required to systematically identify, bundle, and strategically allocate funding to prioritized projects. Only in this way can financing risks be reduced and initial projects brought into implementation.

Beyond financing, participation plays a central role in the regional hydrogen ramp-up. Participation models for municipalities, citizens, and regional companies not only mobilize additional capital but also enhance local acceptance and long-term anchoring of projects. Regional financing and participation instruments can therefore both support market ramp-up and generate political and societal backing for further expansion steps.

Measure 5.1 – Regional Hydrogen Funding and Project Platform

Description: To support the regional hydrogen ramp-up, a funding and project platform will be established to assist regional stakeholders in the development, structuring, and financing of hydrogen and flexibility projects. The measure aims at the systematic identification and combination of existing funding programs at the state, federal, and EU levels. The platform will support project developers in preparing applications, identify suitable funding instruments, and connect regional projects with appropriate programs, particularly within EU funding schemes such as Interreg. At the same time, investment-ready projects will be actively identified and prioritized in order to create a continuous project pipeline effect.

Actors: Participants include the districts, REG, community energy initiatives, and municipal utilities. Where necessary, cooperation with external funding advisory services and EU consultancy bodies will be established.

Timeline: Concept development and establishment are planned for 2026–2027.

Objective: The objective is to improve access to funding, accelerate project development, and increase the likelihood of implementation of regional hydrogen and flexibility projects through targeted support in financing and application procedures.

Interim Targets:

- Support for regional stakeholders in applying for national and European funding programs
- Active identification and structuring of funding-eligible projects
- Linking regional initiatives with suitable EU programs (e.g., Interreg) and other funding instruments
- Establishment of a prioritized project pipeline for hydrogen and flexibility projects

Measure 5.2 – Community Hydrogen Power Plant (H_2)

Description: Within the framework of a cooperative-based community power plant model, citizens and municipalities will be given the opportunity to financially participate in hydrogen installations. The model enables direct participation in investments and returns while strengthening the regional anchoring of projects. At the same time, additional equity capital can be mobilized to support the implementation of hydrogen infrastructure.

Actors: Community energy cooperatives, districts, municipalities, and REG.

Timeline: Concept development in 2026; implementation in 2027–2028.

Objective: To strengthen societal acceptance and increase regional value creation through direct participation in hydrogen projects.

Interim Targets:

- Compilation and preparation of relevant information on participation models, legal framework conditions, and best practices
- Organization of public information and dialogue events
- Support for the implementation of concrete participation projects

Field of Action 6 – Society, Knowledge and Acceptance

The success of regional hydrogen and energy projects depends fundamentally on societal acceptance. Technical feasibility alone is not sufficient if projects encounter local resistance or are perceived as lacking transparency. Acceptance is built through trust, transparent and comprehensible decision-making processes, a fair distribution of benefits and burdens, and access to clear and understandable information.

Experience from the energy transition shows that local resistance often does not stem from fundamental opposition, but rather from a lack of participation, unclear benefit-sharing mechanisms, or insufficient transparency. For the regional hydrogen ramp-up, it is therefore essential to systematically integrate societal aspects from the outset.

The acceptance of renewable energy projects can be considered at different levels. In addition to socio-political acceptance and market acceptance, local acceptance plays a particularly central role, as it ultimately determines the concrete feasibility of individual projects. Effective measures must address these levels jointly and ensure alignment between them.

Guiding principles therefore include dialogue-oriented, participatory, and educational approaches that make local value creation visible and frame the energy transition as a shared regional project. Through appropriate formats such as local energy forums, citizens' assemblies, or educational initiatives, knowledge can be built, trust strengthened, and a positive, forward-looking narrative for regional hydrogen projects can be developed.

Measure 6.1 – Energy Transition and Hydrogen Forums

Description: Regularly recurring energy transition forums will be established as open dialogue and information formats. The forums will combine expert inputs (for example on regional expansion targets or the protection of people and nature) with interactive elements such as workshops or moderated dialogue sessions. Concrete local projects will be presented transparently, complemented by a clear and accessible explanation of planning, permitting, and participation processes. In addition to technical aspects, topics such as energy sufficiency, distributive justice, and regional value creation will also be addressed.

The measure builds on existing established event formats and strategically uses them to anchor the topics within the region—for example within the framework of the Potsdam Energy Days, Hydrogen Day Brandenburg, or comparable regional energy and transformation events. In addition, independent regional dialogue formats will be developed.

Actors: Municipalities will act as hosts; REG and municipal utilities will provide technical input. Academic institutions, civil society actors, and community energy cooperatives may also be involved.

Timeline: Starting in 2026, with at least biannual implementation; in the long term, the objective is to establish a permanent regional energy dialogue.

Objective: To strengthen local acceptance through transparent communication, early participation, and trust-building, while reducing knowledge and information gaps in the context of regional hydrogen and energy projects. The measure aims to develop a positive narrative of the energy transition as a shared regional endeavor, inspired by participatory climate and transformation festivals.

Measure 6.2 – Regional Energy Map

Description: A digital, interactive energy map will be developed for the region, consolidating key information on generation facilities (wind, photovoltaics, biomass, hydrogen), transmission and grid infrastructure, demand centers, flexibility options, and curtailment events. The map will display both existing and planned projects, including their project status, participation opportunities, and relevant environmental and spatial planning aspects. In addition, information on cost and value creation structures will be integrated, such as investment volumes, grid charges, municipal revenues, and citizen participation models.

The energy map will be linked to existing transparency and participation portals and will offer different user perspectives (e.g., citizen mode, professional planning mode, and educational mode) in order to address both expert stakeholders and the general public in a targeted manner.

Actors: REG will assume overall coordination and ongoing data management. The districts will act as interfaces to local land-use and regional planning processes as well as to municipal data sets. Academic partners will support methodological quality assurance, data preparation, visualization, and evaluation of user engagement.

Timeline: Concept development and data collection will begin in 2026, including the development and testing of initial prototypes with focus groups. A first public version will be released in 2027, followed by continuous further development.

Objective: To create a low-threshold, spatially referenced information base for the energy transition in the region, strengthen transparency and procedural fairness, and support municipalities, community energy projects, and educational stakeholders. The energy map will make regional value creation visible and serve as a central communication and educational instrument.

Measure 6.3 – Making Hydrogen Tangible (Schools and Pilot Projects)

Description: To strengthen knowledge and acceptance, an educational and demonstration program on hydrogen and the energy transition will be established. This includes the development of teaching materials, project weeks, and excursions, as well as the use of innovative educational formats such as virtual reality applications, interactive apps, or simulation games. Technical content will be deliberately linked with questions of justice, participation, and regional value creation in order to present hydrogen not only as a technology, but as part of a broader societal transformation process.

Actors: Schools, particularly STEM-oriented and vocational schools—will serve as key learning environments. REG will act as the technical coordinator and contact point for demonstration projects. PROOHV and regional companies (e.g., transport operators, industrial firms, and municipal utilities) will contribute as practice partners. In addition, cooperation will be established with extracurricular learning venues such as energy agencies, environmental centers, or science centers.

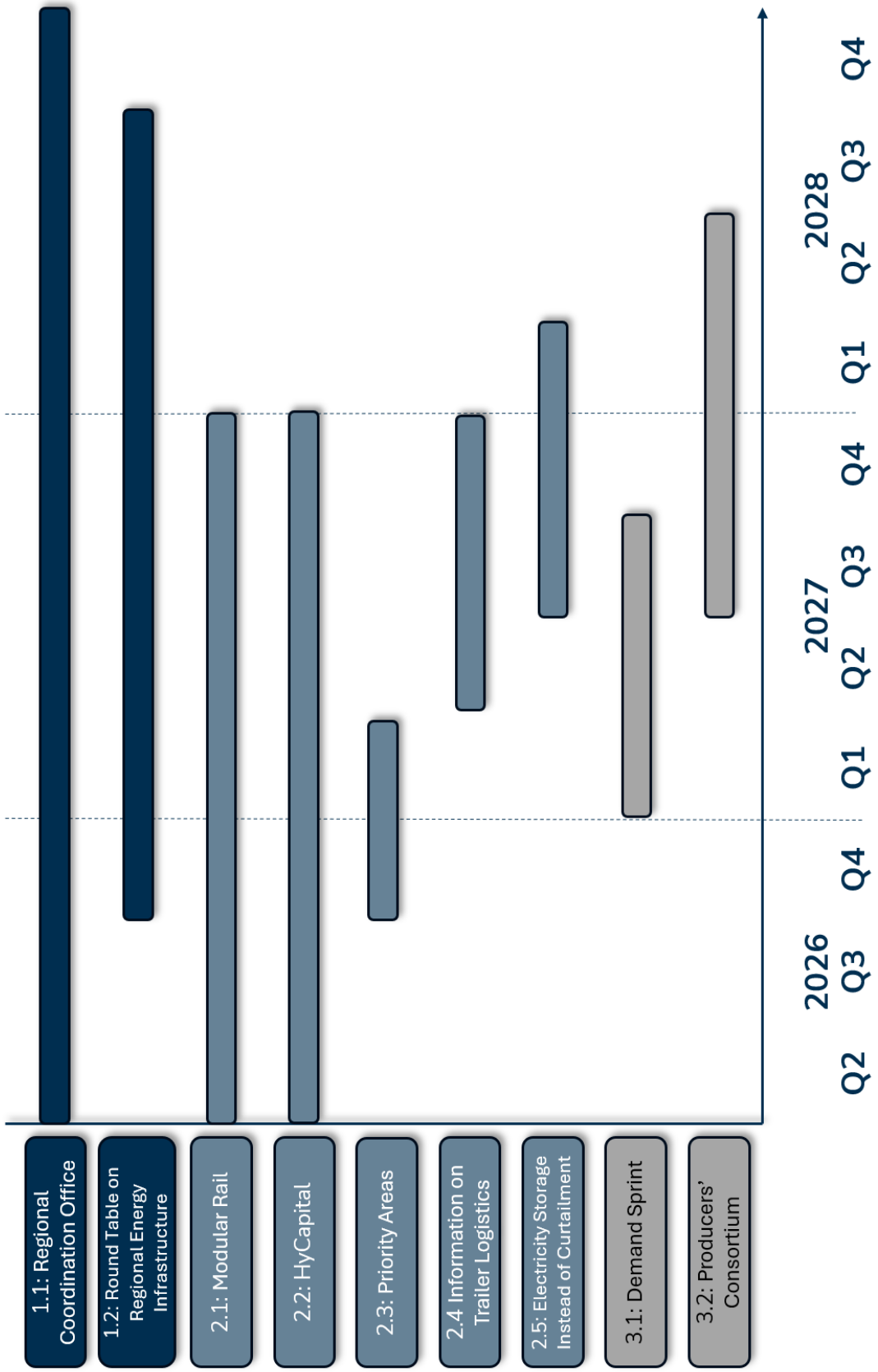
Timeline: Establishment of a permanent educational network from 2026 onwards; program launch with annually recurring action weeks, competitions, or Hydrogen Experience Days for schools and the general public.

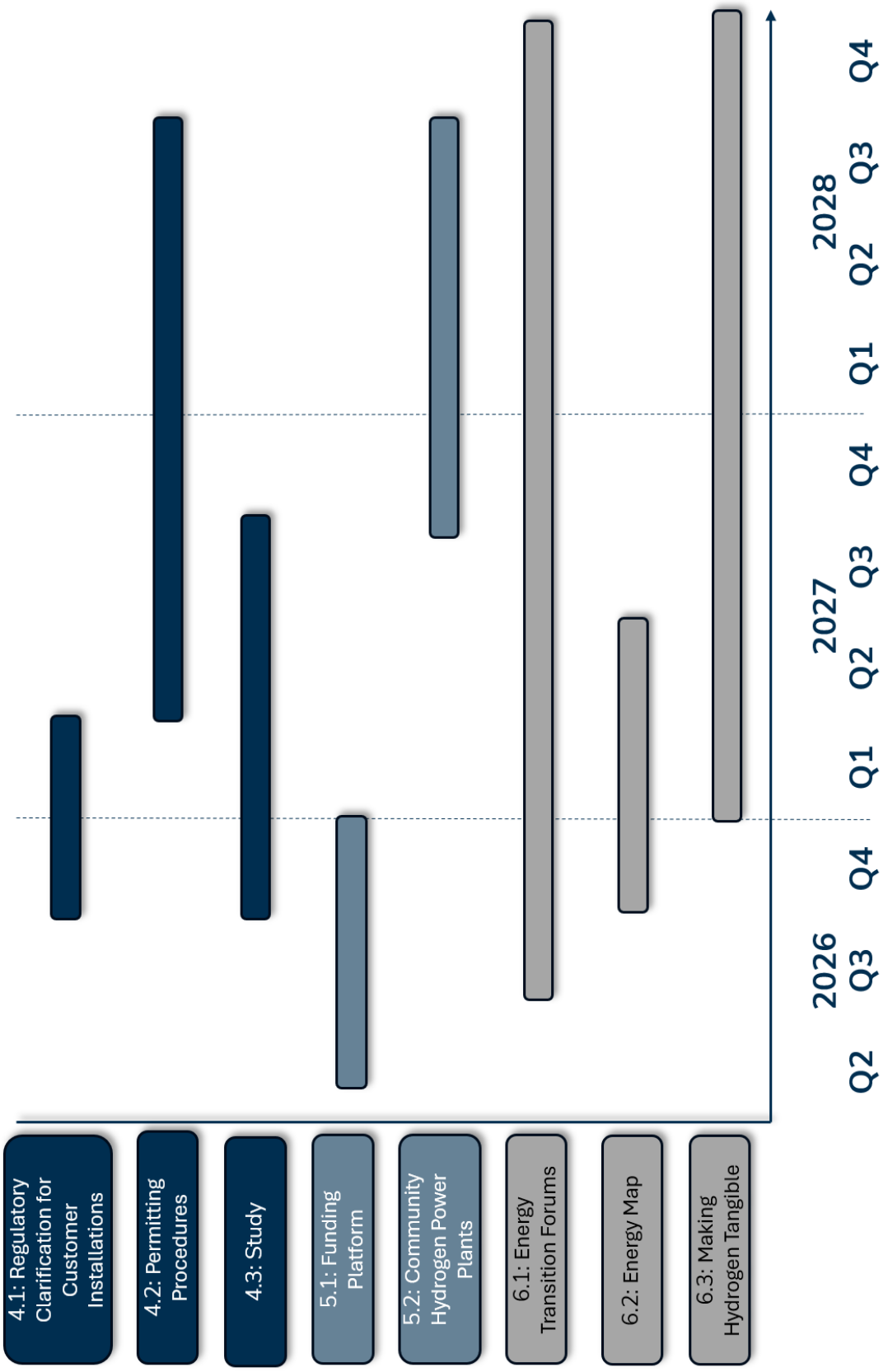
Objective: To build knowledge and technical understanding of hydrogen, reduce uncertainties, and ensure the long-term anchoring of competence and acceptance within the region. By combining education, hands-on experience, and participation, the measure promotes a positive and forward-looking perception of regional hydrogen projects.

Interim Targets:

- Development of an information and education concept for schools and the general public
- Identification and design of concrete demonstration and pilot projects
- Initial implementation of educational and experiential formats within the framework of Hydrogen Week in June 2026
- Provision of standardized teaching and information materials for educators
- Establishment and maintenance of cooperation with regional companies and practical partners

Overview and Timeline




2026
Q2
Q3
Q4
2027
Q1
Q2
Q3
Q4
2028
Q1
Q2
Q3
Q4
4.1: Regulatory Clarification for Customer Installations
4.2: Permitting Procedures
4.3: Study
5.1: Funding Platform
5.2: Community Hydrogen Power Plants
6.1: Energy Transition Forums
6.2: Energy Map
6.3: Making Hydrogen Tangible

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