



Croatia

Action Plan for Sustainable Roll-out of Financing Mechanisms

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1. ABOUT E-FIX PROJECT

The private sector is expected to play an important role for reducing energy demand and reaching of energy targets. About 40 % of the final energy consumption of the EU-28 can be accounted to industry and services (public sector included). In the EU a combination of regulatory mechanisms and incentive schemes are used to trigger energy efficiency and renewable energy development in the private sector. Still, progress is slow and although energy efficiency and renewable energy projects offer a range of financial and non-financial advantages both for public and private actors, little is done to exceed minimum legal requirements. Main barriers for the realisation of private energy efficiency projects can be divided in barriers with regard to the development and implementation of energy projects, on the one hand, and barriers to access funds for financing innovative sustainable energy projects, on the other.

In the target countries of the E-FIX project there is considerable idle potential for energy efficiency and renewable energy products and services. However, both, potential energy project developers and financiers, to a large extent face barrier regarding the accurate assessment of energy project feasibility and achieving investment security.

The underlying approach considered by this project is that an innovative Energy Financing miX (E-FIX) is needed in order to access new sources of finance and facilitate an increased implementation of sustainable energy projects. The E-FIX project will trigger private investments using a mix of innovative financing mechanisms, to be specific: credit lines for energy performance contracting, crowdfunding models and leasing models for energy efficiency and renewable energy projects.

The overall objective of the E-FIX project is to prepare the European market – with a focus on countries of various EU enlargement rounds, as well as markets of countries, which have recently reached EU association status – for the intensified usage of these innovative financing mechanisms in the energy sector in order to facilitate the increase of investments in energy projects and services. The E-FIX project will thus initiate a comprehensive roll-out of energy financing mechanisms in the 6 partner countries (PL, CZ, AT, HR, AM and GE). The 3-dimensional roll-out will cover capacity building, strategy development and piloting of model solutions.

The E-FIX project will result in increased investments in sustainable energy projects in the partner countries as well as lay the groundwork for better-informed and equipped stakeholders. The trainings of these stakeholders will provide them with the capacity to act as E-FIX Ambassadors, multipliers to promote and implement the E-FIX approach. On a larger scale, the E-FIX approach will be disseminated EU-wide, activating dormant private finance thereby contributing to the general growth of the EU markets of energy technology and services as one step into the direction of a low carbon economy.



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2. OBJECTIVE

2.1. Objective scope and target values

Sub-optimal levels of investment in sustainable energy (energy efficiency in particular) are linked to various market barriers such as lack of capacity from project developers, dedicated financial instruments and overall low levels of trust from investors and financiers in the viability of energy efficiency projects. These barriers for introduction of innovative financing models for sustainable energy projects were previously identified in the E-FIX gap analysis and the purpose of this Action plan is to provide realistic actions for removal of these barriers in order to achieve successful roll-out of innovative financing models. In Croatia, two financing models were extensively analysed and piloted as part of the E-FIX project: crowdfunding and energy performance/supply contracting (EPC/ESC). Therefore, the objectives within this Action plan are focused on these two innovative financing models.

- **Objective 1: Establishing crowdfunding as mainstream financing instrument for sustainable energy projects:**
 - **Sub-objective 1.1 Enhancement of regulatory framework** – Dedicated and clear legal framework for implementation of different crowdinvesting models and rules of operation of crowdfunding platforms on the market has to be developed for stronger uptake of this financing instrument. Limitations for public sector’s participation in crowdfunding projects, legal definition of crowdfunding platforms and lack of investor’s protection are some of the key issues that have to be solved. New EU Regulation on European Crowdfunding Service Providers for Business, which shall enable crowdfunding platforms to offer their services across the EU, will also require adaptation of national regulatory framework. This sub-objective will target both private and public sector market actors which come either from the position of project initiators, platform operators or investors/donators.
 - **Sub-objective 1.2 Strengthening capacities of crowdfunding platforms and project developers** – Without a clear legal framework and with constantly low investment volumes, capacities of all key market players have to be increased in order to boost the overall performance of the crowdfunding market and create a pipeline of new projects in the field of sustainable energy. This sub-objective also targets both private and public market actors with all energy relevant sectors being in focus (buildings, renewable energy, industry, transportation).
 - **Sub-objective 1.3 Increasing knowledge and general visibility among citizens, companies and investors about crowdfunding models** – Poor visibility and general awareness about crowdfunding represents one of the main barriers in Croatia as less than 2% of overall population has knowledge on what crowdfunding is or how these instruments work. This issue needs to be addressed in the widest way possible and for this reason this sub-objective will target all interested parties, from general public, potential project developers to major investors.
- **Objective 2: Development of national EPC scheme for energy efficiency projects:**
 - **Sub-objective 2.1 Standardization of EPC documentation** – Availability of standardized EPC documentation with risk allocations is a pre-requirement for the development of the financial mechanism that would support the financing of projects for deep renovation of building stock and integration of energy with non-energy services in both sectors. This standardized EPC documentation has to be made in accordance with the legislative



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framework (Law on Energy Efficiency, Regulation on Contracting and Implementation of Energy Services in the Public Sector), in order to achieve the so-called Maastricht neutral treatment. This sub-objective will target primarily public market actors with several energy relevant sectors being in focus (buildings, public lighting).

- **Sub-objective 2.2 Development of financial instruments for EPC** – Due to considerable market failures across the low carbon economy there is generally an insufficient provision of capital in the sector to implement the programmes and projects required to meet EU and national targets. As financial instruments (FIs) offer a more effective use of public (ESIF) funds for energy projects which generate financial returns, EPC models which combine grant funding with private (ESCO) capital should address the identified market gaps in building and public lighting sectors. This sub-objective will therefore target primarily public market actors and financing institutions.
- **Sub-objective 2.3 Strengthening capacities of project developers** – As EPC model is still a novelty in Croatia development capacities of project initiators are quite low and improvement of knowledge and skills of both public authorities and private sector is key for providing a future pipeline of quality made EPC projects. This sub-objective will primarily target public market actors in building and lighting sectors.

3. ACTIVITIES FOR ACTION PLAN IMPLEMENTATION

Objective 1: Establishing crowdfunding as mainstream financing instrument for sustainable energy projects:

- **Sub-objective 1.1 Enhancement of regulatory framework:**
 - **Task 1 - Engaging institutions in charge of national crowdfunding regulation** – Crowdfunding regulatory framework is entirely within jurisdiction of two Croatian ministries: Ministry of Economy and Sustainable Development and Ministry of Finance and Croatian Financial Services Supervisory Agency (HANFA). Many different interest groups and stakeholders (crowdfunding platform operators, investors, project developers) are present on the crowdfunding market which makes the dialogue between these two sides a difficult process. However, this process needs to be initiated and grouping of key market stakeholders would result in more focused discussions and recommendations for improvement of existing regulation for crowdfunding platforms and projects. After the change of national regulatory framework, the focus can be placed on the barriers to operating platforms across border or investing across border, due to the fragmented and small Croatian market and possibilities for combining ESIF instruments with crowdinvesting capital.
 - **Activity 1 - Establishment of a work group** – Key crowdfunding market actors (all investment and donation-based platform operators, energy and development agencies, NGOs) have to form a group which would thoroughly evaluate current legislative barriers and create realistic recommendations for implementation of improved national legislation for crowdfunding. Work group could establish a twinning relationship with an experienced crowdfunding institution from a more developed EU market in order to acquire necessary practical know-how on necessary legislative transformations.
 - **Activity 2 - Bilateral consultations with ministries and regulatory bodies** – After formation of the crowdfunding work group and creation of a list of legal recommendations, national ministries and regulatory bodies would be officially approached with a request to establish a dialogue. The bilateral consultation meetings would be held with an aim to improve mutual understanding on the topic and jointly discuss options for new legal framework. These meetings would also provide a better-informed



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basis for future policy dialogue between the two sides if new EU directives and regulations are to be made in this field.

- **Activity 3 - Creation of recommendations for new legal framework** – Once the bilateral consultations process is underway, a timeframe for creation of final version of legal recommendations has to be set. The group needs to decide whether a completely new, dedicated law on crowdfunding is needed or improvements within existing laws could be made. Final versions of proposals have to be presented to the national government and if accepted by the government they are sent off for public consultations.
 - **Activity 4 - Implementation of new legal framework** – Public consultations process about the new, improved laws which regulate crowdfunding includes all interested stakeholders (citizens, companies, various institutions) which are free to comment and suggest different solutions to the proposal. The final step for implementation of new legal framework is the official adoption by the Croatian parliament.
- **Sub-objective 1.2 Strengthening of crowdfunding platform operators' and project developers' capacities:**
 - **Task 1 - Assisting existing and potential platforms with adaptation to new regulations and expansion to new financing models** – New national and cross-border crowdfunding regulation will certainly require significant adaptations and changes of the way existing Croatian crowdfunding platforms operate at the moment. New crowdfunding regulation from 2020 contains provisions in respect of organisational and operational requirements for crowdfunding service provider, such as outsourcing, complaints handling, conflicts of interest, marketing communications, provision of asset safekeeping services and payment services and reporting. Additionally, new provisions on investor protection, including presentation of clear information about the financial risks and charges that may incur, including insolvency risks and project selection criteria to project owners and investors have to be incorporated. Since most existing Croatian crowdfunding platforms are limited to basic funding models (reward and donation based) due to current legal barriers, there is a large untapped potential for them to expand their business model into crowdinvesting direction. Energy Finance Competence Centre (EFCC), developed within E-FIX project, will have to step up in this regard and in cooperation with its external partners will provide assistance to potential and existing crowdfunding platforms.
 - **Activity 1 - Workshops and consultations with existing and new platform operators** – Potential developers of new crowdfunding platforms will have the opportunity to learn about the whole step-by-step process on how to set-up a platform in accordance with the new regulation during a series of workshops which will be organized by REGEA and ZICER, in cooperation with founders of other crowdfunding platforms and external experts. Existing crowdfunding platforms will be consulted on the process of adaptation to new regulations and expansion to new funding/investing models in form of bilateral meetings.
 - **Activity 2 - Continuous support for platform operators** – REGEA and ZICER will be part of the national crowdfunding work group and will therefore have access to most recent and relevant information regarding regulation of crowdfunding platforms. As market facilitators and business support organisations (BSOs) their future role will be to provide continuous support to platform operators either in form of business and legal recommendations for more successful operation or consultations about potential projects which could be launched by the platforms. The overall goal would be to increase transparency, confidence and reputation of crowdfunding platforms towards investors and the general public.
 - **Task 2 - Providing technical assistance to project developers through EFCC** – The role of Energy Finance Competence Centre is to become the main contact point for practitioners, energy project



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developers and potential investors searching for appropriate energy financing mechanisms beyond the project duration. In that regard, technical assistance on how to structure and finance projects with different crowdfunding models will be provided on a constant basis to all interested parties. The work of the EFCC will be incorporated within the regular operations of REGEA.

- **Activity 1 - Workshops for project developers** – Regular workshops for targeted organizations (public authorities, SMEs and start-ups, NGOs) will be performed and based on the educational materials which have been developed in the framework of E-FIX project. Project developers will have the opportunity to learn about the whole step-by-step process on how to create a campaign, financially structure and promote it. Workshops will be performed in cooperation with other crowdfunding platforms and external experts.
 - **Activity 2 - Bilateral consultations** – A more thorough form of advisory actions for potential project developers will be made available through bilateral consultations. These can range from providing information to deep assessments of projects and their bankability/suitability for certain crowdfunding models. The EFCC will form a network of cooperants (crowdfunding platform operators, digital marketing agencies, business support organizations, financial institutions and business angels) which will help the EFCC to act as a one stop shop for crowdfunding projects and will help potential project owners to receive a full-scale crowdfunding project development service.
- **Sub-objective 1.3 Increasing knowledge and general visibility among citizens and investors:**
 - **Task 1 - Continuous cooperation of EFCC with platform operators and E-FIX ambassadors on promotion of crowdfunding** – Extremely low levels of awareness about crowdfunding are present in all target groups: decision makers, financial institutions, companies and SMEs as well as general public. Although this can be attributed to unclear legal framework, small number of domestic crowdfunding platforms and projects, the lack of public crowdfunding educational programmes and no awareness raising events, which could support start-ups and SMEs, are truly causing such low popularity of crowdfunding. The EFCC has to embrace the role of market facilitator and promotor of crowdfunding and this can only be done in cooperation with other platform operators and E-FIX ambassadors
 - **Activity 1 - Development of promotional materials and guidelines** – Materials which should help raise awareness on crowdfunding will be made for different target groups. A general guideline needs to include basic information about what crowdfunding is and present its different financing models, provide information on available platforms, give comprehensive information on legal issues both for the private and public sector and show a collection of best practices and guidelines on how to launch a successful campaign. In the longer run, a financial literacy programme (curriculum) should be made for different target groups (SMEs, students, citizens). Being a purely digital model, most information should be distributed through website and social media.
 - **Activity 2 - Organization of events** – Raising of awareness regarding innovative energy project financing has to be performed through broad-based communication activities. These include networking events which bring together crowdfunding platforms, consultants and project owners, together with national authorities and market regulators. The revival of yearly national crowdfunding convention would bring the necessary media attention and showcase best practice examples to the general public. Other, smaller regional events such as workshops and continuation of E-FIX breakfast meetings would be performed by E-FIX project ambassadors, in cooperation with the EFCC, regional business support organizations and platform operators.



Objective 2: Development of national EPC scheme for energy efficiency projects

• Sub-objective 2.1 Standardization of EPC documentation:

- **Task 1 - Initiate and conduct standardization process with relevant ministries** – Creating standard definitions, processes and contract models with payment mechanisms and risk allocations for EPC in accordance with the Eurostat guidance would enable projects to be reduced to a common denominator, thus enabling easier comparison of projects and their aggregation. Since buildings and public lighting represent two major sectors to focus on in EPC, Ministry of Physical Planning, Construction and State Assets will be engaged in this process.
 - **Activity 1 - Establishment of a work group for standardization of documentation** – REGEA and other energy agencies and energy institutes would make an initiative towards Ministry of Physical Planning, Construction and State Assets to form a work group consisting of experts from various relevant ministries, representatives of energy agencies, institutes and external legal experts. This work group would be established for the purpose of developing standardized EPC documentation but would also perform (ex post) assessments of effectiveness of its application and suggest potential enhancements and inclusion of non-energy related services and investments which could be incorporated as an integrated renovation service.
 - **Activity 2 - Creation of sectoral standards and documentation** – Work group's focus in this activity would be on creation of standardized EPC documentation for two sectors: energy renovation of buildings and public lighting. Standardisation of the EPC documentation includes development of unified methodology for energy audits, tendering documents for open and restricted procedures which define legal contractual aspects, risk allocations, payment mechanism, warranties and monitoring and verification methodology. The standardisation process is useful for financial institutions backing ESCO companies since they do not have to perform a detailed due diligence for each individual project. This creates environment for “off the shelf” technical and financial solutions and products which in turn lower the costs significantly especially in cases of small cities and counties whose investments can be bundled into one large investment package.

• Sub-objective 2.2 Development of financial instruments for EPC:

- **Task 1 - Assist national bodies with creation of financial instruments for EPC** – The process of creation of financial instruments (FIs) will be led by the Ministry of Regional Development and EU Funds with assistance from the members of the original work group for development of EPC documentation. The goal of this task is to create tailor made FIs for the national EPC model which will probably come in some form of combined financing (private capital with ESIF / Recovery and Resilience Facility funds). Such FI is necessary for achieving a large leverage (multiplier effect) and is the only way to achieve the overall goals of energy renovation of the building stock by 2030 and 2050.
 - **Activity 1 - Assess and identify market failures/gaps for uptake of EPC for energy efficiency** – Financial instruments are designed to address market imperfections in the availability of finance and previous ex ante performed in Croatia acknowledged existence of market failure in financing energy efficiency projects. EPC has been identified as an optimal model for building and public lighting projects due to its effectiveness and potentials for leveraging of private capital. However, ex ante assessment of the energy market has to be re-done for the new ESIF programming period by financing and energy experts in order to evaluate market gaps and investment volumes for energy renovation of building and public lighting sector.
 - **Activity 2 - Design financial instruments which address market failures of EPC** – Financial instruments for EPC are currently non-existent and ESCOs and public authorities are left without proper sources of capital. Development of financial instruments is a process which will be almost



parallel with the development of standardised EPC documentation and within this activity new stakeholders have to be added to the original work group: Ministry of Regional Development and EU Funds, Ministry of Finance, Croatian Bank for Reconstruction and Development and commercial banks. FIs are diverse in objectives, target recipients, scale and governance making this tailor making of FIs for EPC model a demanding and time-consuming activity. External assistance or twinning cooperation with other EU member states (e.g., Slovenian EPC model) with similar FIs and EPC schemes might be needed.

- **Activity 3 - Initiate national EPC scheme for energy efficiency projects** – The launch of the EPC scheme for energy renovation of buildings and public lighting is the final step in the process. Pilot projects will be carefully chosen based on developed E-FIX quality criteria assessments, monitored and ex post assessed to determine execution and effectiveness of the EPC contracts. Being an iterative process, EPC documentation and financial instruments will be enhanced based on the results of ex post assessment.

- **Sub-objective 2.3 Strengthening of project developers' capacities:**

- **Task 1 - Building of capacity of project developers and a pipeline of future EPC projects** – End-users' and the financial community's concerns about the reliability of ESCOs is a major issue in Croatia which will be addressed by standardisation of contracts or key contractual provisions and availability of national financing scheme (FIs) for EPC projects. Standard contracts should increase the trust of customers, accelerate the negotiation process, especially in the public sector, and thereby their willingness to engage and create a pipeline of future EPC projects. Standardisation of the EPC contracts in public lighting sector will create “off the shelf” projects and a stimulating environment for potential investors and ESCO companies for wider market uptake. However, a stronger initiative to perform intensive capacity building with project developers is necessary for full success of the national EPC scheme.
- **Activity 1 - Workshops for project developers** – Public authorities represent the primary target group and regular workshops will be performed through the EFCC and in cooperation with other partnering organisations (mostly energy agencies and E-FIX ambassadors). Project developers will have the opportunity to learn the whole step-by-step process on how the EPC scheme works and what benefits it brings in comparison to the traditional model of realization. ESCOs represent the second target group and their animation and education is necessary due to small number of existing ESCO companies on the market and their modest track record and experience with EPC projects.
- **Activity 2 - Technical assistance for project developers through EFCC** – Technical assistance relates to an ongoing one-stop-shop service for project developers which will be provided through the EFCC. This assistance can range from giving basic information about the EPC model to in-depth technical and financial assessments of potential projects.



Table 3.1 Action plan – innovative energy financing mechanism development in Croatia

Objectives and sub-objectives	Tasks/Activities	Success criteria	Timeframe	Resources
1. Establish crowdfunding as mainstream financing instrument for energy efficiency				
1.1 Enhancement of regulatory framework	T.1 Engaging institutions in charge of national crowdfunding regulation	- All relevant institutions in charge of crowdfunding framework engaged	2 years	- Ministry of Economy and Sustainable Development
	A.1 Establishment of a work group	- Established work group for crowdfunding regulatory framework	6 months	- REGEA and ZICER
	A.2 Bilateral consultations with ministries and regulatory bodies	- Conducted consultations between work group and national regulatory bodies	1 year	- Work group for crowdfunding
	A.3 Creation of recommendations for new legal framework	- Developed recommendations for new legal framework	1.5 years	- Work group for crowdfunding
	A.4 Implementation of new legal framework	- Implemented new legal framework for regulation of crowdfunding	2 years	- Ministry of Economy and Sustainable Development
1.2 Strengthening of crowdfunding platform operators' and project developers' capacities	T.1 Assisting existing and potential platforms with adaptation to new regulations and expansion to new financing models	- Existing and new platforms adapted to new crowdfunding regulation and having new financing models introduced	3-5 years	- Energy Finance Competence Center
	A.1 Workshops and consultations with existing and new platform operators	- Regular workshops performed - Consultation service set up and available	2-3 years	- Energy Finance Competence Center
	A.2 Continuous support for platform operators	- Regular support provided to platform operators	3-5 years	- Energy Finance Competence Center
	T.2 Providing technical assistance to project developers	- Technical assistance service established and being constantly available	3-5 years	- Energy Finance Competence Center



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Objectives and sub-objectives	Tasks/Activities	Success criteria	Timeframe	Resources
	A.1 Workshops for project developers	- Workshops regularly conducted	3-5 years	- Energy Finance Competence Center
	A.2 Bilateral consultations	- Consultation service established and constantly available	3-5 years	- Energy Finance Competence Center
1.3 Increasing knowledge and general visibility among citizens and investors	T.1 Continuous cooperation of EFCC with platform operators and E-FIX ambassadors on promotion of crowdfunding	- Established cooperation on promotion of crowdfunding	5 years	- Energy Finance Competence Center - E-FIX ambassadors - Platform operators
	A.1 Development of promotional materials and guidelines	- Developed promo materials and guides for citizens and investors	1-2 years	- Energy Finance Competence Center and other crowdfunding stakeholders
	A.2 Organization of events	- Regular annual crowdfunding conference organized with other key stakeholders - Breakfasts with stakeholders	5 years	- Energy Finance Competence Center and other crowdfunding stakeholders
2. Development of national EPC scheme for energy efficiency projects				
2.1 Standardization of EPC documentation	T.1 Initiate and conduct standardization process with relevant ministries	- EPC standardization process initiated and completed	2 years	- Ministry of Physical Planning, Construction and State Assets - Work group
	A.1 Establishment of work groups for standardization of documentation	- Work group established	6 months	- Work group
	A.2 Creation of sectoral standards and documentation	- Sectoral standards and documentation for EPC created	2 years	- Ministry of Physical Planning, Construction and State Assets - Work group
2.2 Development of financial instruments for EPC	T.1 Assist national bodies with creation of financial instruments for EPC	- Cooperation with national bodies established	3 years	- Ministry of Regional Development and EU Funds - Work group



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Objectives and sub-objectives	Tasks/Activities	Success criteria	Timeframe	Resources
	A.1 Assess and identify market failures/gaps for uptake of EPC for energy efficiency projects	- Market gaps and failures for EPC identified	1 year	- Ministry of Regional Development and EU Funds - Work group
	A.2 Design financial instruments which address market failures of EPC	- Financial instruments for EPC designed	1.5 years	- Ministry of Regional Development and EU Funds - Work group
	A.3 Initiate national EPC scheme for energy efficiency projects	- National EPC scheme for EE projects initiated	1 year	- Ministry of Regional Development and EU Funds
2.3 Strengthening of project developers' capacities	T.1 Building of capacity and pipeline of future EPC projects	- Raised capacities of project developers - Pipeline of future EPC projects created	3 years	- Energy Finance Competence Center
	A.1 Workshops for project developers	- Regular workshops for project developers conducted (twice a year)	3 years	- Energy Finance Competence Center
	A.2 Technical assistance for project developers through EFCC	- Technical assistance service established and being constantly available	3 years	- Energy Finance Competence Center



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4. MEASURING SUCCESS OF IMPLEMENTATION

Table 4.1 Action plan – target indicators and measurement of success

Objectives and sub-objectives	Tasks/Activities	Target indicator	Method of measurement and validation
1. Establish crowdfunding as mainstream financing instrument for energy efficiency			
1.1 Enhancement of regulatory framework	T.1 Engaging institutions in charge of national crowdfunding regulation	Institutions involved in modification of crowdfunding regulation: - Ministry of Economy and Sustainable Development - Ministry of Finance - Croatian Financial Services Supervisory Agency	- Changed/upgraded crowdfunding regulation (adoption of laws relevant for crowdfunding)
	A.1 Establishment of a work group	- At least 10 institutions (all domestic crowdfunding platform operators) becoming part of the work group	- Signed memorandum of cooperation between group members
	A.2 Bilateral consultations with ministries and regulatory bodies	- At least five bilateral consultations conducted with ministries and regulatory bodies	- Minutes of consultation meetings/e-mails of correspondence
	A.3 Creation of recommendations for new legal framework	- A list of propositions for legal framework improvement	- Proposal for improvement of legal framework signed by all work group members
	A.4 Implementation of new legal framework	- New legal framework for regulation of crowdfunding	- Adopted laws for improvement of crowdfunding regulation
1.2 Strengthening of crowdfunding platform operators' and project developers' capacities	T.1 Assisting existing and potential platforms with adaptation to new regulations and expansion to new financing models	- All existing domestic crowdfunding platforms adapted to operation under new national and EU legislation - Transformation of at least two existing crowdfunding platforms to investment platforms - Entry/foundation of at least two new crowdfunding platforms on Croatian market	- All platforms with implemented legislation requirements (visible online) - Crowdfunding platforms providing investment models (loans, equity, share in profits) - New registered platforms/existing international platforms entering Croatian market
	A.1 Workshops and consultations with existing and new platform operators	- Organization of at least two workshops a year for 5 potential and existing crowdfunding platforms - Consultation service set up and constantly available - contacts established with all domestic platforms	- EFCC report on workshops - attendance sheets - EFCC minutes of consultation meeting/e-mails
	A.2 Continuous support for platform operators	- Technical support service established within EFCC - support provided to at least three platforms	- EFCC report on this service provided
	T.2 Providing technical assistance to project developers	- Technical assistance service established within EFCC and being constantly available - at least 10 projects worth 300.000 EUR per year assessed and supported for launch	- EFCC assessment reports and evidence of campaigns publicly launched on platforms
	A.1 Workshops for project developers	- At least two conducted workshops per year with 50 attendees - project developers	- EFCC report on workshops - attendance sheets



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	A.2 Bilateral consultations	- Consultation service provided to at least 50 project developers per year	- EFCC report with minutes of consultation meetings/e-mails
1.3 Increasing knowledge and general visibility among citizens and investors	T.1 Continuous cooperation of EFCC with platform operators and E-FIX ambassadors on promotion of crowdfunding	- Established permanent cooperation with all existing E-FIX ambassadors and platform operators in Croatia	- Signed memorandum of cooperation between E-FIX ambassadors and platform operators beyond duration of E-FIX project based on developed communication strategy
	A.1 Development of promotional materials and guidelines	- One online guideline for project developers created within EFCC page and leaflets	- Online guideline available - Leaflets for project developers available
	A.2 Organization of events	- Organization of at least one dedicated annual crowdfunding conference for a minimum of 70 attendees	- EFCC report on annual event - attendance sheets
2. Development of national EPC scheme for energy efficiency projects			
2.1 Standardization of EPC documentation	T.1 Initiate and conduct standardization process with relevant ministries	- Ministry of Physical Planning, Construction and State Assets initiating the process of EPC documentation standardization	- Official decision made by the Ministry of Physical Planning, Construction and State Assets
	A.1 Establishment of work groups for standardization of documentation	- At least 5 institutions (energy agencies, institutes) becoming part of the work group	- Signed memorandum of cooperation between group members
	A.2 Creation of sectoral standards and documentation	- Sectoral standards and documentation for EPC projects in the buildings sector and public lighting created and ready for use	- Standardized EPC documentation published by the national ministries and made available to project developers
2.2 Development of financial instruments for EPC	T.1 Assist national bodies with creation of financial instruments for EPC	- Cooperation with Ministry of Regional Development and EU Funds established on formal level	- Signed contract between parties developing financial instruments
	A.1 Assess and identify market failures/gaps for uptake of EPC for energy efficiency projects	- Developed ex ante report for energy efficiency projects in buildings and lighting sector - market gap identified	- Ex ante report published and available on the website of Ministry of Regional Development and EU Funds
	A.2 Design financial instruments which address market failures of EPC	- ESIF funded financial instruments allocated for two sectors: energy renovation of buildings and modernization of public lighting	- Financial instruments established for EPC schemes
	A.3 Initiate national EPC scheme for energy efficiency projects	- National EPC scheme set up and operational - At least 50 projects worth 100 mil. EUR funded per year through the EPC scheme	- Signed contracts and reports of realized projects through the EPC scheme
2.3 Strengthening of project developers' capacities	T.1 Building of capacity and pipeline of future EPC projects	- At least 20 trained project developers per year - A pipeline of 500 mil. EUR worth of future EPC projects created	- EFCC report on workshops - attendance sheets - A base of energy renovation projects in the pipeline
	A.1 Workshops for project developers	- At least two conducted workshops per year with 70 attendees in total - project developers and ESCOs	- EFCC report on workshops - attendance sheets
	A.2 Technical assistance for project developers through EFCC	- Permanent technical assistance service established and being constantly available	- EFCC assistance and project assessment reports



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5. IMPLEMENTATION STRATEGY

5.1. Resources needed to implement the Action Plan

The implementation of activities which were set out in the action plan will require an extensive amount of human and financial resources. Only a preliminary estimation can be given, having in mind that the comprehensiveness and overall workload cannot be appraised at this phase due to inexperience with execution of such ambition targets. A divided overview of needed resources for the two financing models has been given due to their core dissimilarities in terms of stakeholders, laws and institutions in charge.

Table 5.1 Action plan – resources needed for implementation

Objectives and sub-objectives	Tasks/Activities	Resources needed
1. Establish crowdfunding as mainstream financing instrument for energy efficiency		
1.1 Enhancement of regulatory framework	T.1 Engaging institutions in charge of national crowdfunding regulation	<ul style="list-style-type: none"> - Experts on crowdfunding from each of 10 relevant institutions which would form and work in the group (1/4 of work time - 240.000 EUR) - Institutional support - members of national ministries and HANFA available for meetings, consultations and creation of recommendations for upgrade of legal framework - External advisory services - twinning partner from EU (optional)
1.2 Strengthening of crowdfunding platform operators' and project developers' capacities	T.1 Assisting existing and potential platforms with adaptation to new regulations and expansion to new financing models	<ul style="list-style-type: none"> - At least one EFCC expert from REGEA for conducting workshops and continuous technical assistance (1/5 work time - 8.000 EUR per year)
	T.2 Providing technical assistance to project developers	<ul style="list-style-type: none"> - At least one EFCC expert from REGEA for conducting workshops and continuous technical assistance (1/3 work time - 12.000 EUR per year) - Funds for organization of two workshops (1.000 EUR per year)
1.3 Increasing knowledge and general visibility among citizens and investors	T.1 Continuous cooperation between EFCC, platform operators and E-FIX ambassadors on promotion of crowdfunding	<ul style="list-style-type: none"> - At least one EFCC expert from REGEA in charge of development of promo materials and guidelines (1/5 work time - 8.000 EUR per year) - Funds for organization of annual crowdfunding conference (3.000 EUR per year)
2. Development of national EPC scheme for energy efficiency projects		
2.1 Standardization of EPC documentation	T.1 Initiate and conduct standardization process with relevant ministries	<ul style="list-style-type: none"> - Experts on EPC from several relevant institutions which would form and work in the group (500.000 EUR) - Institutional support - members of national ministries available for meetings, consultations and creation of recommendations for standardization of EPC documentation - Legal experts for development of EPC tender documentation (100.000 EUR) - External advisory services - twinning partner from EU (optional)
2.2 Development of financial instruments for EPC	T.1 Assist national bodies with creation of financial instruments for EPC	<ul style="list-style-type: none"> - Experts on financial instruments from several relevant institutions which would form and work in the group (1.000.000 EUR) - Institutional support - members of national ministries available for meetings, consultations and creation of recommendations for creation of FIs - Legal and financial experts for ex ante assessments and financial modeling services (1.000.000 EUR) - External advisory services - twinning partner from EU (optional)
2.3 Strengthening of project developers' capacities	T.1 Building of capacity and pipeline of future EPC projects	<ul style="list-style-type: none"> - At least two EFCC expert from REGEA for conducting workshops and providing continuous technical assistance (full work time - 80.000 EUR per year) - Funds for organization of two workshops (1.000 EUR per year)



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Due to high costs for development of EPC scheme, national ministries should consider launching a technical assistance program through the European Local Energy Assistance (ELENA) programme or European Investment Advisory Hub (EIAH) and dedicating a share of funds from the Operational Program 2021-2027. Technical assistance would support the preparation of standardized EPC and documentation, risk allocation as well as the development of the financial mechanism that would support the financing of projects for the complete renovation of the building stock and public lighting.



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5.2. Time schedule

Table 5.2 Action plan – Time schedule for implementation of activities

Objectives	Sub-objectives, Activities and Tasks	Implementation timeframe									
		S2/2021	S1/2022	S2/2022	S1/2023	S2/2023	S1/2024	S2/2024	S1/2025	S2/2025	
O.1. Establish crowdfunding as mainstream financing instrument for energy efficiency	S.O. 1.1 Enhancement of regulatory framework	[Gantt bar from S2/2021 to S1/2023]									
	T.1 Engaging institutions in charge of national crowdfunding regulation	[Gantt bar from S2/2021 to S1/2023]									
	A.1 Establishment of a work group	[Gantt bar from S2/2021 to S1/2022]									
	A.2 Bilateral consultations with ministries and regulatory bodies	[Gantt bar from S2/2021 to S2/2022]									
	A.3 Creation of recommendations for new legal framework	[Gantt bar from S2/2021 to S2/2022]									
	A.4 Implementation of new legal framework	[Gantt bar from S2/2021 to S1/2023]									
	S.O. 1.2 Strengthening of crowdfunding platform operators' and project developers' capacities	[Gantt bar from S2/2021 to S2/2025]									
	T.1 Assisting existing and potential platforms with adaptation to new regulations and expansion to new financing models	[Gantt bar from S2/2021 to S2/2025]									
	A.1 Workshops and consultations for existing and new platform operators	[Gantt bar from S2/2021 to S2/2025]									
	A.2 Continuous support for platform operators	[Gantt bar from S2/2021 to S2/2025]									
	T.2 Providing technical assistance to project developers through EFCC	[Gantt bar from S2/2021 to S2/2025]									
	A.1 Workshops for project developers	[Gantt bar from S2/2021 to S2/2025]									
	A.2 Bilateral consultations	[Gantt bar from S2/2021 to S2/2025]									
S.O. 1.3 Increasing knowledge and general visibility among citizens and investors	[Gantt bar from S2/2021 to S2/2025]										
T.1 Continuous cooperation of EFCC with platform operators and E-FIX ambassadors on promotion of crowdfunding	[Gantt bar from S2/2021 to S2/2025]										
A.1 Development of promotional materials and guidelines	[Gantt bar from S2/2021 to S2/2025]										
A.2 Organization of events	[Gantt bar from S2/2021 to S2/2025]										
O.2. Development of national EPC scheme for energy efficiency projects	S.O. 2.1 Standardization of EPC documentation	[Gantt bar from S2/2021 to S1/2023]									
	T.1 Initiate and conduct standardization process with relevant ministries	[Gantt bar from S2/2021 to S1/2023]									
	A.1 Establishment of work groups for standardization of documentation	[Gantt bar from S2/2021 to S1/2022]									
	A.2 Creation of sectoral standards and documentation	[Gantt bar from S2/2021 to S2/2022]									
	S.O. 2.2 Development of financial instruments for EPC	[Gantt bar from S2/2021 to S2/2024]									
	T.1 Assist national bodies with creation of financial instruments for EPC	[Gantt bar from S2/2021 to S2/2024]									
	A.1 Assess and identify market failures/gaps for uptake of EPC for energy efficiency projects	[Gantt bar from S2/2021 to S2/2022]									
	A.2 Design financial instruments which address market failures of EPC	[Gantt bar from S2/2021 to S2/2022]									
	A.3 Initiate national EPC scheme for energy efficiency projects	[Gantt bar from S2/2021 to S2/2024]									
	S.O. 2.3 Strengthening of project developers' capacities	[Gantt bar from S2/2021 to S2/2025]									
T.1 Building of capacities of project developers and a pipeline of future EPC projects	[Gantt bar from S2/2021 to S2/2025]										
A.1 Workshops for project developers	[Gantt bar from S2/2021 to S2/2025]										
A.2 Technical assistance for project developers through EFCC	[Gantt bar from S2/2021 to S2/2025]										



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6. COLLABORATION WITH STAKEHOLDERS

6.1. Stakeholders involved in AP development

Energy efficiency investments, by nature, are considered complex domains that cannot be addressed by any single actor. Coordinated efforts are required with multiple stakeholders, from various sectors and target groups, to contribute to the development of innovative and sustainable solutions. Development of Croatian Action plan was based on the co-creation model, as collaborative activities were foreseen and multiple interdependent external stakeholders have contributed to the plan's development process, thus creating value for everyone involved. In this regard and depending on project's objectives and activities and on the stakeholders' type, different levels of stakeholder engagement were identified, ranging from the provision of information to a co-creation and genuine collaboration and proactive involvement in outcomes delivery and decision-making processes.

Within the national context of Croatia, various programmes are underway to deliver energy efficiency targets, still the key challenges to be faced are the combined financing of private and public capital and the use of the financial instruments for energy efficiency investments. Considering the fact that the new financial perspective (2021-2027) is in the programming phase, the engagement, the development, and the implementation of the E-FIX project is intended to contribute to overcoming problems of the traditional model for renovation of public and private infrastructure and accelerating investments by supporting development of national programmes and initiatives for financing relevant projects while aiming more ambitious energy efficiency targets.

Several different methods for involvement of key stakeholders were adopted by REGEA and ZICER during the process of development of action plan to ensure the stakeholders' commitment to the co-creation of the project with their active and well-prepared participation to all project phases and more particularly to the proposed work groups for enhancement of both crowdfunding and EPC models in Croatia.

In that regard, a number of engagement events were organized to discuss improvements of the crowdfunding market in Croatia. Informal work group meetings were organized during 2019 and 2020 with internal stakeholders who are considered the groups and/or individuals that are already part of the project: E-FIX ambassadors, close partners of REGEA and ZICER and future members of the specialised work group. The purpose of these meetings was to discuss the overall concept of the Action plan, key objectives, list of activities, and strategies for engagement of institutional stakeholders needed for achieving the desired market changes. Several of these internal stakeholders' meetings and bilateral consultations have been organized:

- 1st meeting was organised online in July 2019 to form an informal work group for improvement of crowdfunding regulation. Ten institutions decided to form a work group: REGEA (as crowdfunding platform operator – Croenergy.eu), ZICER, Funderbeam South-East Europe (platform operator), Brodoto (crowdfunding and media specialists), Cooperative for Ethical Financing (ZEF), Green Energy Cooperative – ZEZ (platform operator), A1 (platform operator), Public Institution RERA S.D, Center for Social Innovations and Sustainable Development – CEDIOR (platform operator) and Agency for European Integration and Economic Development (AEI) as a twinning partner. During the meeting various suggestions for improvement of crowdfunding market and legal framework were discussed with general conclusion that the group has to be formalized and a meeting with Ministry of Economy and Sustainable Development has to be organized.
- 2nd meeting was organised as part of the E-FIX ambassadors training in January 2020. A discussion between key stakeholders (crowdfunding platform operators, NGOs, SMEs, public authorities) was



conducted to discuss objectives, tasks and actions that should be taken to improve the overall market conditions. Valuable inputs were collected for development of the draft version of Action plan.

- 3rd meeting was also organized within the E-FIX ambassadors training in December 2020 during which the draft version of the Action plan was presented and discussed with around 20 stakeholders. Comments and suggestions from this meeting were used to finalize the Action plan.
- Bilateral meetings – between REGEA, ZICER and Centre for Social Innovations and Sustainable Development – CEDIOR and Green Energy Cooperative – ZEZ also took place multiple times during 2020 as both institutions are crowdfunding platform operators. New EU regulation on crowdfunding (platforms) was the main topic and something that was mutually decided that had to be addressed in the Action plan as the centrepiece of the document.

Energy performance contracting was the second topic for which a different approach was taken. REGEA and ZICER internally discussed potential improvements of the ESCO market in Croatia and after the initial Action plan was made a series of roundtable events and bilateral consultations were organized in cooperation with two ongoing initiatives: Sustainable Energy Investment Forum (SEIF) for Croatia and Smart Financing Implementation – SMAFIN project. These events were used as an invitation only discussion platforms between national ministries and project developers and financiers. Two roundtable events were organized in total:

- SEIF forum in October 2020 – organized by REGEA with almost 150 participants the roundtable event was used for enhancing capacity of and co-operation between public and private stakeholders to develop large-scale investment programmes and financing schemes with a focus on Energy Performance Contracting (EPC) for sustainable energy projects in Croatia. Main conclusions from this event present the backbone of the action plan for enrolment of EPC model in Croatia.
- SMAFIN roundtable event in January 2021 – organized by REGEA with around 70 participants was focused on existing barriers and potentials for replicability of Slovenian EPC programme. The decision to create a work group and twinning cooperation between two countries was made and incorporated within the action plan.

Bilateral meetings with all relevant national ministries and financial institutions were a constant activity performed by REGEA prior to roundtable events. Consultations on how and what to present and discuss was mandatory to ensure their full participation on these events and draw some joint conclusions on further actions.

6.2. Roles and responsibilities of Stakeholders for Action Plan implementation

Table 6.1 Action plan – Roles and responsibilities for action plan implementation

Stakeholder groups		Role and responsibility	Involvement and communication strategy
Implementing parties	- REGEA - ZICER	- Leaders of work groups for crowdfunding and EPC - Managers of EFCC - Organization of thematic workshops and promotional events - Developers of materials for capacity building and promotion	- Lead partners for implementation of activities and involvement of all key stakeholders
Political decision makers	- Ministry of Economy and Sustainable Development - Ministry of Finance - Ministry of Physical Planning Construction and State Assets - Ministry of Regional Development and EU Funds	- Development and implementation of new legal framework for crowdfunding - Co-development and implementation of standardised EPC documentation - Development of national scheme and financial instruments for EPC	- Work group participation - Bilateral consultations



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Target groups	<ul style="list-style-type: none"> - Crowdfunding platform operators - Crowdfunding project developers - ESCOs - Financial institutions - EPC project developers 	<ul style="list-style-type: none"> - Participation in thematic work groups for crowdfunding and EPC - Assisting EFCC with organisation of thematic workshops and promotional events - Creation of pipeline of crowdfunding and EPC projects 	<ul style="list-style-type: none"> - Work group participation - Bilateral consultations - Participation at workshops and public events
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7. MONITORING STRATEGY

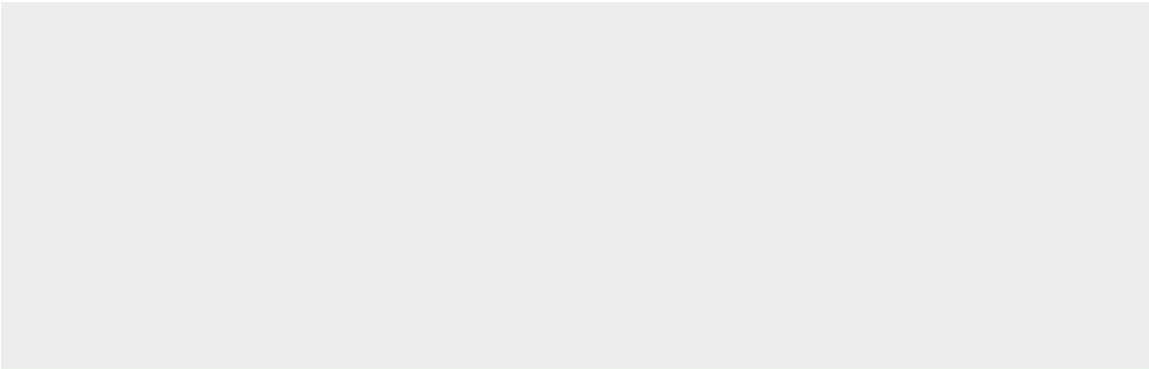
Monitoring strategy is a long-term plan for addressing realization of Action plan's activities and performance over time, and it is essential for assessing success of the E-FIX project. Action plan has clear and measurable target indicators whose realization will be closely monitored by the Energy Finance and Competence Center.

Although the monitoring will be done on a continuous basis, an interval of six months has been set for development of an internal monitoring report. The report will assess all planned activities with focus set on financial/technical indicators regarding investments launched, energy savings reached and information on pipeline of future projects for each financing model (EPC and crowdfunding). This information are key for monitoring of energy and investment targets that have to be reached in the five-year period after the end of E-FIX project.

The report will be made by the members of EFCC and its results will be presented to all partnering institutions who are involved in the related activities. Depending on the results of the monitoring report the EFCC could, in consultations with relevant partners, propose mitigation actions or amendments to the action plan which could lead to changes in the timeline or even target indicators of the action plan. With ambitious action plans as this one, it is crucially to continually improve its activities and performance. If major changes do occur, they will be presented to all involved parties and stakeholders who would have to be in agreement with these changes.



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