



**Technology Executive Committee**

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## **Tracking the implementation status of TAPs<sup>1</sup>**

### **Background paper**

#### **I. Why track TAP implementation**

1. To increase the exchange of knowledge and experience sharing between countries, and to enhance national and international awareness of the potential of TNAs and TAPs to upscale technology transfer, improved tracking of implementation status of the TAPs and their actions would be very useful.
2. Therefore, it is suggested that, after TNA project completion, a system for tracking the status of TAPs is set up in the country which has prepared TNA and TAPs. Since the tracking of TAP implementation status is done after TNA project finalization and the years to come, the tracking will be done by countries on a voluntary basis.
3. Because it is important to learn from all types of experiences, tracking of the TAPs is not only a tracking of the successful implementation but also of TAPs which are still in the process of reaching implementation, to include both success stories and challenges.
4. The information generated through the TAP tracking system will be used to systematically collect and share experiences on how and if countries have been able to attract financial and technical support for implementation of TAPs. This would form a good basis for countries to learn from each other and replicate experiences from other countries. It will allow promotion of further implementation of TAPs and improve stakeholder engagement within the TNA country.
5. The information reported through the TAP tracking system should be presented in a simple table format as a summary with key information on TAP implementation status, to limit the resource implications for reporting entities.

#### **II. Who reports**

6. The tracking of TAP implementation may involve several focal points as specified in Step 3 of the guidance for preparing TAPs, where stakeholders were identified and assigned responsibility to manage a given activity in a TAP. While these stakeholders are key to drive the implementation of the activities, an effective tracking system may require that one single entity has the overall TAP status tracking responsibility, with a designated person for this task. The stakeholders being responsible for the activity implementations should then report to the overall TAP tracking entity. This entity could be the legal entity for the TNA project in which the TNA coordinator is based, it could be the National Designated Entity (NDE) for the development and transfer of technologies, or it could be a third option chosen by the country.
7. Similar to the identification of stakeholders for the TAP implementation in section 3.1 it is important that the entity with the overall tracking responsibility feels sufficiently committed to follow the implementation status of the TAPs and to report on a regular basis. It would also be an advantage if the responsible entity is familiar with the TNA project, its

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<sup>1</sup> The following guidance will be part of the guidance on preparing TAPs prepared by the TEC.

stakeholders, and its TAPs and project ideas. An illustration of the reporting structure is given in the Figure 1 in the following section.

### III. What to report

8. The reporting should be done by filling out a table, for each TAP selected for monitoring (minimum 4 TAPs per country, possibly having closest substantive link to NDC and NAP priorities), similar to the Table 1 below. The reporting table serves as basic template for reporting and could be modified or extended. The Technology Executive Committee (TEC) of the UNFCCC agreed that this set of information would be very helpful in informing Parties to the UNFCCC and other interested stakeholders on the status of the TAPs. Such a monitoring (tracking) would also be very helpful for the TAPs further promotion within and beyond the UNFCCC, for their possible financial support. The information collected in this table would provide adequate basis for the UNFCCC Technology Mechanism bodies (TEC and CTCN), and the UDP to keep track of implementation status and to share the information through various channels. The country may choose to report on all TAPs or it may decide to keep track of a selected number of TAPs (minimum 4 TAPs per country).

Table 1

#### Types of information required

<b>TYPE 1 INFORMATION: Problem Addressed and Barriers Identified</b>
<b>TYPE 2 INFORMATION: Initiative(s) Identified</b>
<b>TYPE 3 INFORMATION Linkages to Other Processes</b>
<b>TYPE 4 INFORMATION Status or Progress of Initiative(s)</b>
<b>TYPE 5 INFORMATION Contact and Other Available Information</b>
<b>TYPE 6 INFORMATION Next Steps and Resources Needed</b>

9. In the Table 1, different types and levels of information that offer significant potential for gathering “lessons learned” from TAPs are shown in fairly clear categories: Problem; Initiative; Linkages; Status; Information; and Next Steps. The following articles provide more information about these categories.

(a) Type 1 information involves the definition of underlying problems, including barriers to progress. This is useful “lessons learned” information because it quickly sets the stage for possible application by others. It shortens the list of examples for others to study. It targets readers’ interests. It allows for statement of the original results of the TNA-TAP (such as barriers identified for technology implementation) while creating the opportunity to update that statement if significant changes have occurred;

(b) Type 2 information is comprised of the strategies, tactics, projects or activities (“initiatives” or actions identified in a TAP)<sup>2</sup> originally and subsequently identified as addressing the problems and barriers. Such information can inform others how simple technologies and techniques can be used to address significant challenges. The following example illustrates the value of high-level priority setting to build both immediate and longer-

<sup>2</sup> Step 2 of the Guidebook Enhancing Implementation of Technology Needs Assessments; <http://www.tech-action.org/Publications/TNA-Guidebooks>.

term response capacity, and how advance planning can facilitate responses when problems have been anticipated;

(c) Type 3 information indicates the all-important linkage of initiatives to other processes and plans, including national, UNFCCC and other plans. There have been ongoing discussions on harmonizing TNA with other processes under the Convention, including NAPs, and NDCs. The main rationale for such harmonization is to identify measures, options, actions for climate change mitigation and adaptation that are in line with countries' national sustainable development objectives. Such linkage will be useful in showing efficiencies and synergies among different processes and demonstrating continuity. In addition, the linkages would also ensure that the processes are well harmonised for an effective linkage with the financial mechanism;

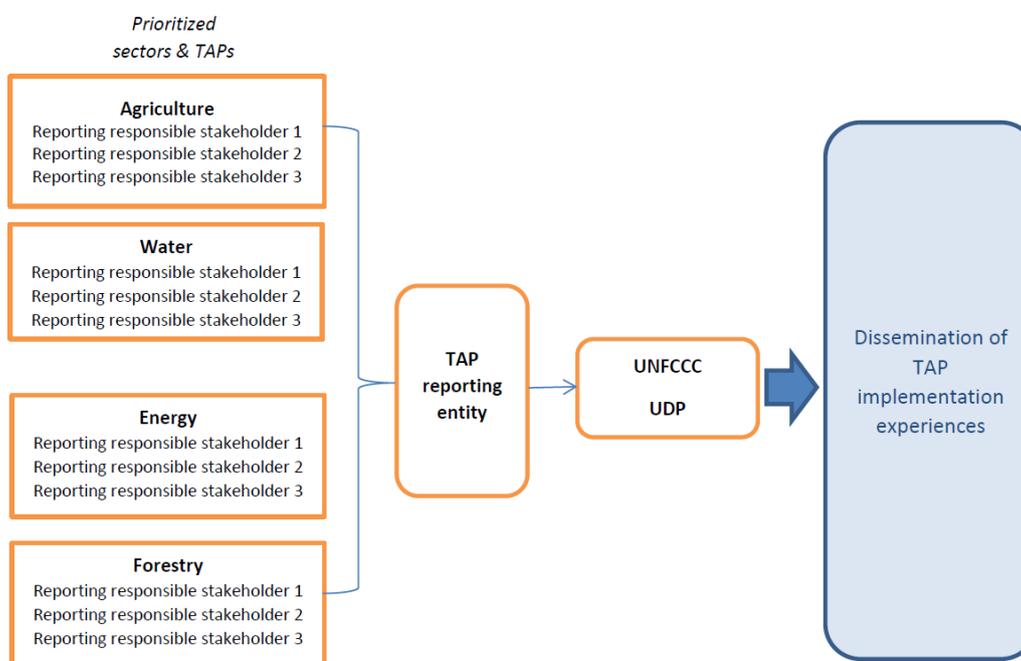
(d) Type 4 Information reports the current status of TAP actions. Such information will inform others on the requirements of implementation. As the following example notes the level of detail ("granularity") in such reports is particularly useful in illustrating the applicability of an example to another setting. This example is also a particularly instructive example of problem statement along with barrier identification (Type 1 Information);

(e) Type 5 information incorporates both contact details and additional information resources. Contact information is essential to the direct sharing of lessons learned. Additional information, if available, can foster greater collaboration and faster learning often self-guided, and therefore cost effective;

(f) Type 6 information involves next steps and needed resources. This information can inform forward-looking resource provision and assistance, and avoid the frustration of "having a good idea but nowhere to turn". Linkage to "next steps" often accelerates the momentum of an initiative, as the following example illustrates, as well as highlighting information gaps that should be addressed to achieve the objective of "tracking progress" rather than just "reporting".

Figure 1

### TAP tracking reporting and dissemination



## **IV. How to report**

10. Once the entity responsible for the TAP tracking has collected the required information and filled out the table for each of the TAPs being tracked, the table should be submitted to the UNFCCC and UDP.

11. The reporting should be done at an annual basis and the TAP reporting entity will receive a request from the UNFCCC and UDP.

12. The information reported through the TAP tracking system will be compiled and presented in a simple table format, as a summary with key information on TAP implementation status, with the aim to limit the resource implications for reporting entities. The information will be publicly available.

13. Entities responsible for TAP tracking may be invited to events (TNA workshops, TNA side events, etc.) to share their experiences and lessons learned from TAP implementation with other countries. The compiled TAP tracking information will be also shared with other countries and stakeholders through available knowledge sharing platforms, including TT:Clear of the UNFCCC.

## Annex

### Report from workshop "Moving from Technology Needs to Implementation of Technology Actions"

#### Technology Needs Assessment (TNA) Training Workshop

Moving from Technology Needs to Implementation of Technology Actions,  
27 June 2017, Cotonou, Benin

1. The workshop assisted Parties to conduct their technology action plans (TAPs) in a way that they will contain all the elements of bankable action plans. The existing TAP guidance was recommended as the leading document for TAP improvement. Several TAPs from the TNA Phase I and II countries were presented.
2. The workshop discussed options for monitoring (tracking) TAP implementation after TNA project finalization. A draft methodology was discussed with a view to produce a draft methodology in late summer 2017 to be considered by the Technology Executive Committee at its fifteenth meeting in September 2017.
3. The workshop discussed opportunities to benefit from synergies between the TNA and National Adaptation Plan (NAP) processes of developing countries. Countries' experiences with using adaptation technologies in adaptation planning were presented and discussed, including opportunities to benefit in the NAP process from having the list of adaptation technologies prioritized in the TNA process. The discussion had the objective to showcase and discuss how the processes could complement each other in a way that possible duplications or inconsistencies between the processes could be avoided.

#### I. Introductory session

4. Representatives of the following African countries participated at the workshop: Benin, Burkina Faso, Burundi, Gambia, Mali, Mauritania, Senegal, South Africa, Swaziland, Tanzania, Tunisia, and Zimbabwe. These included representatives of Ministries, National environmental institutes, NDEs, TNA coordinators, National climate change focal points, member of the TEC, and national consultants.
5. The workshop started with a presentation provided by the UNFCCC on the role of TNAs and TAPs in the Paris Agreement, and the TNA and TAP in the Decision 1/CP.21. The presentation included TAP analysis with highlighting strengths and challenges of the TAPs conducted so far. The participants were invited to use the TEC TAP guidance in order to improve their TAPs towards bankability, to be able to attract financing sector to turn their TAPs into implemented projects. In the following discussion, countries wanted to learn on key elements of the TAP to facilitate better bankability., and they were keen to learn from others on how they conducted their TAPs and which support and challenges they faced.

#### II. Country TAP Experience session

6. Two TNA TAP presentations were given by countries (Tunisia and Burundi). They provided overview of their approaches to TAP conducting and planning of implementation. The presentations included how they identified and prioritized technologies, focusing on one prioritized mitigation and adaptation technology, barriers of their transfer, market mapping analysis, and identification of TAPs. They also highlighted to the workshop participants which challenges they had faced during the TNA process, including data availability and lack of human capacities. Other countries which have prepared TNAs and TAPs contributed with their experiences on TNA and TAP preparations. This resulted in a good exchange of knowledge between TNA Phase I and II countries on how to best prepare for implementation of TAPs.

7. On technology and project prioritization one country said, that prioritized projects are usually, in their country, on a list of the host Ministry, which in the case of the TNA is commonly the Ministry of Environment of a country. It was also said that in case the TNA project would be more sectoral diversified (amongst more sectors of national economies), different needs and technologies would be possibly selected.

### **III. Support of implementation of TAPs session**

8. On provision of technical support to implement TAPs, one country asked for plans of the CTCN to support the regional TAPs. A representative of ENDA Energy, Environment and Development Programme, from Senegal, who is an African Consortium Partner of the CTCN, shared their experiences with technical assistance support to TNA countries. He said that it is important to further assist the implementation challenge in Africa in short to medium term, in order to close the gap between project ideas and implementation.

9. On provision of funding some countries noted, based on their own experiences, that a combination of domestic and international funding is crucial for success in implementing the TNA results. The need of having domestic money to implement TAPs was raised during the discussions and there was a large agreement that countries should, to the extent possible, set aside resources to co-finance implementation.

10. Countries also mentioned the important role of financial experts in facilitating TAP implementation, and it was highlighted that financial experts should be involved in TNA country projects from the beginning, as a solid part of the TNA team. It was noted that after several rounds of TNA projects, supported by multiple policy recommendations by the TEC, a vast majority of the TNA countries is struggling with involving financial experts into their teams, and there is a significant potential for their more frequent involvement in future.

11. On TNA and TAP mainstreaming, countries discussed on how to mainstream the TNA process in their national planning documents in a way that the results of the TNA process would become nationally visible. They believed that such visibility will promote their further support and usage, also in other national climate change processes.

### **IV. Monitoring of implementation of TAPs session**

12. At its 14th meeting the TEC agreed to test the proposed option (1) of the monitoring process in a selected number of countries, and to further elaborate on the objective of such monitoring. The TEC also agreed that a methodology for tracking implementation of TNA results may be developed and included in the existing TNA guidance, taking into account the amount of resources required for countries to support such an effort. At the same meeting the TEC highlighted the combined responsibility of the NDEs and the TNA coordinators, considering that NDEs are counterparts for this process in their countries.

13. During the workshop, countries discussed how to put a proper mechanism for monitoring of TAP implementation in place. Some countries mentioned that NDEs should be in charge of monitoring implementation status, other said that sectoral ministerial authorities should be responsible for monitoring, based on the sector in which the TAP was reported.

14. On monitoring all countries agreed that a follow up of the TAPs must be secured in the countries, and that this message should be strongly shared amongst the developing countries which conducted their TNA and TAPs. It was noted by several countries that at the moment TNA committees are often dissolving after the project finalization, though it was also recognized that many countries use existing climate change committees, which then continue after TNA completion. Moreover, it was noted, governments are changing sometimes very frequently in African countries, compared to other regions, which makes it very difficult to track the TNA and TAP implementation with a government focal point.

15. Countries also discussed why they should report and what should motivate them, agreed that there are multiple benefits for a country when the TAPs are implemented and further promoted, beyond the scope of the TNA project. Some countries mentioned also passion and patriotism as the incentives for taking on the lead for monitoring of their TAPs implementation.

16. One country said that there was an interest from its private sector important player to further develop one of their TAP project, however there was no contact person at the Ministry available anymore to communicate with the private sector organization.

17. On monitoring authority, some countries mentioned that there is information gap existing between NDEs and NDAs of the GCF which they discussed to be closed in future.

### **A. Monitoring – Who should report to whom?**

18. Countries agreed that in order to facilitate an effective implementation there is a must to designate a responsible person to follow up on the TAP implementation and stand ready for tracking the implementation status of TAPs even years after the TNA project is finalized.

19. There were several suggestions on the stakeholders involved in monitoring. One country, in which the TNA coordinator and NDE is the same person, proposed that the TNA coordinator reports to UDP and CTCN for information and also for possible technical assistance. Other country said that a person should be allocated by a responsible national authority to follow up on the TAP implementation, based on the persons' expertise and experiences with project implementation.

20. Another country said that a report from each sector (Ministry) should be prepared to track the implementation and forwarded to NDE who should compile it, and disseminate it, at national and international levels. NDEs, NDAs and DNAs should become a part of the national climate change committee or any related steering committee in order to be properly informed and to provide their experiences and findings into the committee.

21. In some countries the TNA coordinator is also NDE, and these countries proposed that this person should be responsible for monitoring/tracking implementation. Some countries argued that an information gap may appear when the person will leave the TNA and NDE positions, hence they proposed that other persons are also engaged and tutored on the TNA and TAP, to secure a continuous information flow.

22. Another country recommended climate change focal point to be responsible for monitoring.

### **B. Monitoring – Template based on option 1 of the TEC-14 monitoring paper**

23. A template was developed based on the option 1 of the TEC paper on “Draft methodology on monitoring and evaluation of the implementation of technology needs assessment results”. The option 1 template was provided to the training workshop participants to be tested. It included following six types of information: 1. Problem addressed and barriers identified; 2. Initiative identified; 3. Linkages to other processes; 4. Status or progress of initiative; 5. Contact and other available information; 6. Next steps.

24. The template was tested by the workshop participants and described as ‘easy to fill-in’, ‘easy to understand’ and ‘objective oriented’. Some countries noted that suggestions of the most feasible TAPs for tracking should be done in the countries by sectoral experts before the template is filled in, in order to make the tracking process with filling in the template effective and with the most relevant and right information as possible.

### C. Questions for group discussions on tracking TAP implementation

25. To learn from countries on monitoring element of the TNA process, the following nine questions for group discussions on tracking TAP implementation were prepared in advance of the workshop, and distributed to participants during the workshop. In continuation, the questions were answered by the training workshop participants, both in written and through discussions. A summary of country responses are provided in the bullets below for each of the questions.

(a) Why do you think tracking of TAP implementation could be useful for your country?

- (i) In order to further promote the good work done at the TAP development and to fulfil its implementation potential;
- (ii) To be informed on, and to benefit from, experiences of other countries;
- (iii) To promote successful outcome of the good TNA work;
- (iv) To communicate good project ideas with national decision makers and international technical and financial community;
- (v) TNA is an opportunity for developing countries to mainstream mitigation and adaptation technology planning process on the national level in a longer term. Hence the tracking of TAP implementation is useful for promotion of TAP implementation in all sectors of national economies and beyond national borders;
- (vi) To provide valuable inputs into national monitoring systems of climate change response plans.

(b) How do you think tracking TAP implementation could be done after TNA project completion?

- (i) A roadmap could be elaborated for tracking including deadlines, and actors need to be collaborated and coordinated;
- (ii) Tracking at the sectoral level and an aggregation at the national level;
- (iii) Giving the appropriate stakeholders ownership of the TAP implementation – TNA coordinator reporting to NDE – NDE report to national level (Ministries) and international level (UNFCCC – TM bodies);
- (iv) Set aside a specific budget during the TNA project for appropriate stakeholders to initiate TAP monitoring, and involve national institutions.

(c) Who should be responsible for keeping track of implementation and reporting it?

- (i) NDEs, the national climate change focal point and TNA coordination team;
- (ii) Each sector of the national economy similar to the types of technologies and projects prioritized in TNA and TAPs. National report should be produced for domestic and international purpose. Can be done by a National Climate Change Committee and through BURs, NDCs, and specific reports through NDEs to CTCN;
- (iii) Selected stakeholders (a committee at the responsible Ministry), or NDEs;
- (iv) The TNA coordinator during the project life time, and later on the UNFCCC national climate change focal point;
- (v) NDEs to secure continuity;
- (vi) At national level, the focal point of climate change. At international level, the UNFCCC;
- (vii) Both NDE and national TNA coordinator.

(d) How often should progress on TAP implementation be reported?

- (i) Every two years at the international level and yearly at the national level;

- (ii) Depending on the national settings, possibly yearly;
- (iii) Depending on the TAP implementation time line, report should be periodic, the date of submission should be known in advance;
- (iv) Once a year.
- (e) Do you find the provided templates for the TAP tracking easy to fill?
  - (i) It is easy to fill;
  - (ii) Easy if the TNA coordinator managed to put a coherent monitoring framework in place during the TNA project life time;
  - (iii) Depends on access to information, collaboration and coordination amongst the involved stakeholders;
  - (iv) The template should also be open to countries to add more relevant information, based on their specific national circumstances.
- (f) Do you think the template is good enough to capture all the relevant information on actions and activities implemented from the TNA/TAPs? Is there anything which should be changed in the template?
  - (i) The template could also provide a place to report some inter-mediate results to contribute to the TAP implementation process;
  - (ii) Should include information on cost and funding institutions (national – bilateral – multilateral) and the implementing institutions. Position of various institutions in relation to the TNA project may evolve in time;
  - (iii) Sources of funding.
- (g) Are you well informed about TAP implementation from other countries in the region?
  - (i) Yes, via an informal partnership with several TNA countries;
  - (ii) Only little information is available on TAP implementation;
  - (iii) No forum for information sharing was established after completing of TNA projects. Maybe it should a role of regional coordinator, or countries;
  - (iv) UNFCCC meetings could be a good point to exchange information, although TNA coordinators and NDEs are usually involved in negotiations;
  - (v) TAPs were usually conducted individually by countries, rarely consulting each other.
- (h) Would it be useful to get information on experiences from TAP implementation from other countries? If so, please explain why?
  - (i) In order to have more information to overcome technology transfer barriers;
  - (ii) Could be a lesson on how TAP projects can be funded and challenge faced and overcome;
  - (iii) In order to ensure the best conditions for the TAP implementation, countries should be informed on similar experiences and successes in other countries, which may be time saving, and serve as good example;
  - (iv) It is always useful to learn from experience of others and avoid failures others have made;
  - (v) Countries may seek guidance from those who did outstanding work in past.
- (i) Taking into account the regional specifics, how do you think the information about TAP implementation could be better communicated, to reach the largest possible audience?

- (i) Creation of regional platforms that could be helpful to meet once a year. GCF and GEF capacity building support programmes could be helpful in financing such initiatives;
- (ii) Ministries responsible for the TAP implementation should call on its regional directorates to integrate TNA process, which will subsequently serve as support for better communication to reach the widest possible audience;
- (iii) Through regional NDE forums;
- (iv) Through regional economic groups, UNEP and UNFCCC.

26. All the issues that countries raised above will be further discussed by the UNFCCC and UNEP DTU Partnership (UDP) and possibly also by the TEC and the CTCN, and taken into account when developing a methodology for tracking implementation of TNA results, with a view to be included in the TNA guidance in 2017/2018.

## **V. TNA and NAP and NDC processes, synergies and possible benefits session**

27. Linkages of TNA process with NAPs and NDC processes were discussed by the training workshop participants. The discussion included a suggestion for dissemination of results of the TNAs to the other processes in mitigation and adaptation. One country recommended using the TNA results into NDC which is seen as the national reference for climate change issues. One country said that when mainstreaming adaptation into national planning, the vulnerability mapping of the country done in their TNA report, will be offered to its decision makers.

28. Country participants with experience from conducting NAP confirmed that their TNA and NAPA reports were used in their NAP. To reach this, they said that extensive capacity building of relevant experts was needed, to inform these experts about the TNA and TAP reports and other relevant documents to create a complementary reporting track. ENDA said that more information sharing on the linking TNAs with other processes would be needed to assist countries in their reporting. The UNFCCC presentation on potential linkages between TNAs and NAPs was shared amongst the participants to facilitate awareness creation and further dissemination of this information in country participants' respective countries.

29. Some countries were using the same teams of national experts and consultants to develop their TNA and NAP and also NDC reports. For some countries the idea of linking TNA, NAP and NDC teams was new and they said that they will try to connect their TNA and NAP teams to build a common view.

30. Countries discussed how to best link their technology, and mitigation and adaptation related efforts with financial mechanism under the Convention, and applying for the readiness programme of the GCF.

## **VI. Wrap up and conclusions**

31. The training workshop was organized in conjunction with the African Carbon Forum. This allowed for easier access to some key participants, lowering logistical cost, and learning from countries' emission reduction national agendas to see how to best embed the TNA agenda with in these in future. The collaboration of UNEP UDP and UNFCCC was complementary, combining policy and project management aims and agendas. The training workshop was organized pragmatically, in a constructive working mode aiming for concrete results. The workshop participants were active, deeply involved in discussions, committed and creative. The discussions offered positions of twelve African countries, based on their national experiences, local conditions and environments.

32. The monitoring template was tested in the African region. The monitoring questionnaire provided a good overview of the positions of countries on TAP monitoring and delivered some innovative ideas in relation to stakeholders, information flow and resources

needed for a sound monitoring. Objectives of monitoring process were well described by countries. Linkages between TNA process and other mitigation and adaptation processes were seen by countries as beneficial and needed.

33. The training workshop also revealed that some countries expressed a need for further capacity building to follow up on the TNA agenda and to embed the related requirements within their national environments. More training workshops of this kind were seen useful by participants, covering also other regions.

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